

**September, 1957**

# *The American School Board Journal*



**A PERIODICAL OF  
SCHOOL ADMINISTRATION**

## *In This Issue:*

**Merit Rating on Trial**

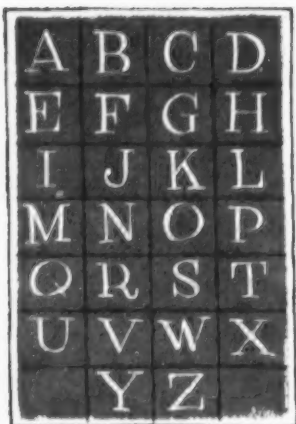
**Testing Programs in Our Schools**

*—Noble and Weitz*

**Discipline and Administrative Support**

*—Bell and Green*

**West Springfield Senior High School — Wright**



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*plumbing wholesaler*

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 of luxurious skyscraper apartments will  
 soon be completed. Pictured at top left is  
 900 ESPLANADE and below it  
 is COMMONWEALTH PROMENADE.



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rooms) will be summer and winter air-conditioned and equipped with individual room controls. All will feature maximum soundproofing for quiet privacy. All will be served by high speed, electronically teamed elevators and all corridors will be pressurized. In a project of such fabulous designing nothing less than the best would suffice, hence all towers are to be equipped throughout with SLOAN Quiet Flush VALVES and SLOAN Act-O-Matic SHOWER HEADS.

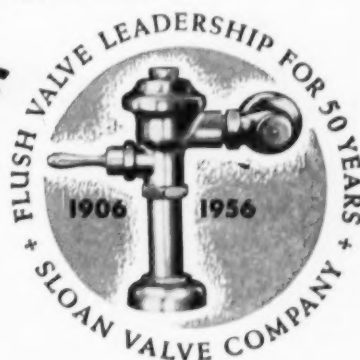
### **SLOAN** *Flush* **VALVES**

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Another achievement in efficiency, endurance and economy is the SLOAN Act-O-Matic SHOWER HEAD, which is automatically self-cleaning each time it is used! No clogging. No dripping. Architects specify, and Wholesalers and Master Plumbers recommend the Act-O-Matic—the better shower head for better bathing.

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# THE AMERICAN School Board Journal

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*for September, 1957*

In your JOURNAL for September, you'll find discussions of school issues that are probably of special concern to you as the 1957-58 school year begins.

On merit rating, a summary of the basic arguments for and against the plan — presented in a manner that could serve as a springboard for your discussions during the coming year.

On science teaching, Mr. Taylor and Dr. Patterson outline a program of how industrial leaders can improve science teaching . . . followed by the details of an ideal opportunity for school-industry co-operation: the science fair, as conducted in Pekin, Ill., by Virgil Dollahon.

Also: on your testing program as an important phase of your entire guidance, counseling, and special education program, a review of the basic facts about I.Q. and achievement tests and the essentials of a testing program in your schools; on discipline, the duties of the board, administration, etc., in effecting a sound program; on public relations, how radio and television fit into your entire community public relations.

The schoolbuilding section this month highlights the widely-discussed West Springfield,



Mass., senior high school — presented in this year's A.A.S.A. Schoolbuilding Exhibit. You'll find it's an interesting variation on the finger type plan that facilitates a comprehensive curriculum in an appropriately modern plant.

Once again, these are only the highlights. You'll find many more articles, plus the JOURNAL's regular departments, will help you tackle many of your school's problems during the coming year!

**WILLIAM C. BRUCE, Editor**

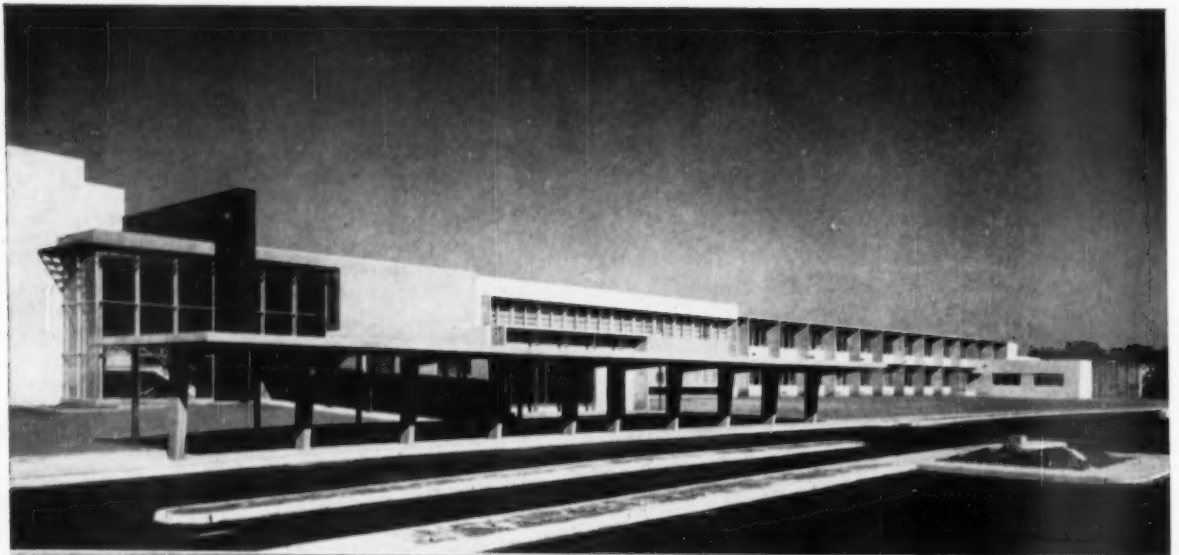
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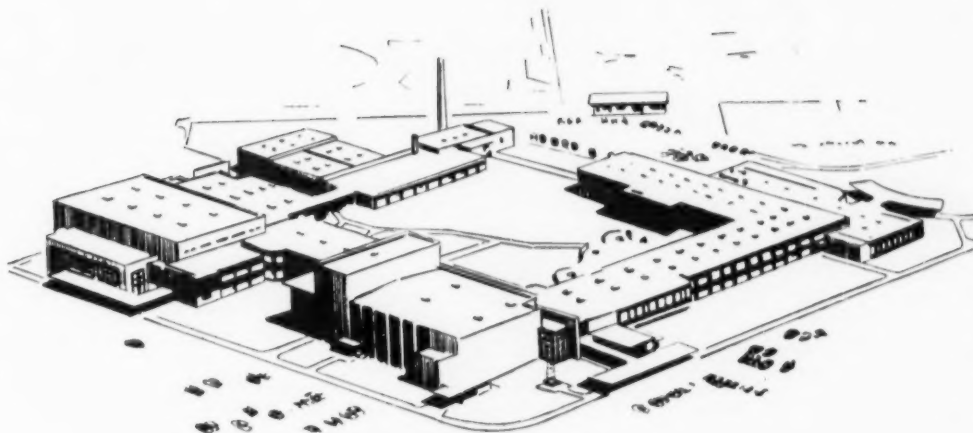
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Impressive design, exceptionally complete educational facilities, a carefully controlled environment for student learning and development, plus integrated facilities to meet the social, recreational and cultural needs of the adult members of the community...

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\* Northwest Classen High School, Oklahoma City, Oklahoma. Hudgins, Thompson, Ball and Associates, architects; William J. Collins, Jr., mechanical engineer; Builders Construction Company, general contractor; White and Messer Plumbing and Heating Company, heating contractor, all of Oklahoma City.

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# Surveying the School Scene



## BILL FOR FEDERAL SCHOOL CONSTRUCTION AID KILLED

The House of Representatives, only July 25, voted against allowing federal funds to be used to aid local school districts in their school building programs. The action of the House, in killing the proposed legislation, was such that there is no possibility for reopening the matter during this session of Congress.

The original Administration's school construction program—to provide \$1.5 billion in three years with a greater emphasis on need—was put before the House by Rep. William H. Ayres (R, Ohio) in place of the compromise measure which the House had been debating—for \$300 million during the next five years distributed to the states, half on the basis of school population and half on need. "This is the bill that the President was for," he was quoted in the Congressional Record of the former measure.

The vote to kill the legislation was 208 to 203. Voting to kill the bill were 111 Republicans and 97 Democrats, while 77 Republicans and 126 Democrats voted against the motion to kill.

As in 1956, an antisegregation clause, which would limit federal funds to school districts which had complied with the 1954 Supreme Court decision, was again a major factor in the bill's defeat. The clause was attached by Stuyvesant Wainwright (R, N. Y.). Of the above party vote, the only Southerners to vote for the legislation were Alabama Congressmen.

In a press conference on July 31, President Eisenhower defended his role in the federal school aid bill demise against "non-support" charges by a liberal Democrat bloc which had voted against killing the bill. "I will have another bill ready for the next session of Congress," the President said.

## SIX GUILTY IN CLINTON SCHOOL CASE

An all-white jury on July 23 convicted segregation leader John Kasper and six co-defendants in the Clinton, Tenn., contempt trial. They face up to six months in jail and fines up to \$1,000 or both. Four others were found not guilty.

The court has given the defense lawyers 20 days to file their motion for a new trial. Kasper and the others were charged with criminal contempt of court, and of knowingly violating a court order forbidding interference with orderly integration of Clinton high school.

According to newspaper reports, 11 of the 12 Clinton jurors are opposed to integration. They uniformly declared themselves to be Southerners, who believe that there should be separate but equal school facilities for members of the colored race. Their decision, they say, was based on the law and the evidence presented to them.

## PRIVATE SCHOOLS FOR WHITE CHILDREN

Prince Edward County, Virginia, is ready to operate private schools for white children if integration comes. The Prince Edward Educational Association, a private organization, began two years ago to set up schools in view of the Supreme Court's desegregation decision.

Under the plan, a majority of the 60 white principals and teachers have been signed up to teach in the private system. Space has been lined up in churches, homes, commercial buildings, and warehouses. More than \$10,000 in cash and \$190,000 in pledges are to be depended on for basic financing. The same administrative system will be used to put Negro children in their own private system.

## FUND GRANT TO N.S.B.A.

To assist the National School Boards Association in its program to strengthen the school board movement in America, the Fund for the Advancement of Education has granted

(Continued on page 86)

## EDUCATIONAL LEADERS SEE FEDERAL AID AS IMMINENT... UNNEEDED

The future of federal aid to school construction, after this year's very close defeat by the House of Representatives, is viewed in varying ways by educational leaders. In special reports to JOURNAL readers, they believe that:

**Lawrence G. Derthick** I share Secretary Folsom's deep regret and disappointment that a school construction enactment has failed in the first session of the 85th Congress. It has been heartening, however, that the 208 to 203 vote in the House represented a very narrow margin of defeat. The measure voted on last year lost 224 to 194.

School construction assistance will continue to be given priority in the legislative program of the Department of Health, Education, and Welfare for the second session of the 85th Congress. As the shortage of classrooms continues to persist, we are confident that the problem will receive further serious consideration by the Congress.

**Finis E. Engleman** A switch of two "no" votes to "yes" would have passed the school construction act by the House of Representatives. Na-

tional polls show that the majority of voters wish some of their federal taxes to be used for schoolhouse construction. Close votes in the House of Representatives proves that Congress is moving to this point of view also. Soon Congress must let people use their own tax money as they wish.

People realize, and Congress will soon do so, that our economy is not local but national in character and our financial resources cannot fairly or adequately be taxed except on the national level.

**Everett N. Luce** The shortage of classroom space can only be partially

solved by federal aid. The defeat of HR 1 should be an indication that this approach to solving our schoolbuilding problem is unsatisfactory to many.

Congress, therefore, should make a strong effort to reduce federal income taxes. A portion of this savings could then be used in the states for schoolbuilding purposes. The states should enact legislation making it possible for more local effort. Presently many of our state laws prevent this. Assistance for federally impacted housing areas should be continued. Hardship cases should be provided for wherever they exist.



"Too bad you ain't a power company, kid."



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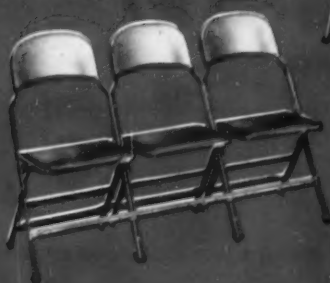


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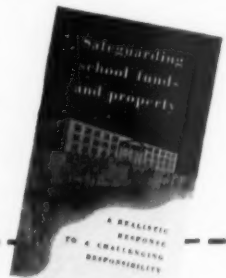
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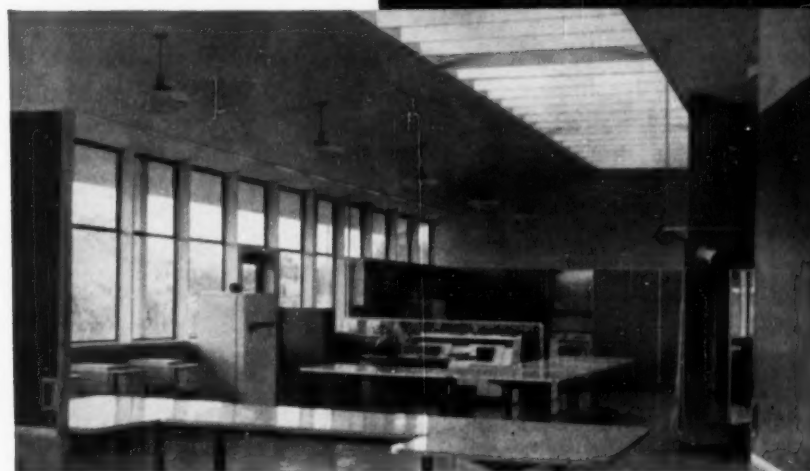
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New Newark Elementary School, Newark, California



Silva Intermediate School, Newark, California

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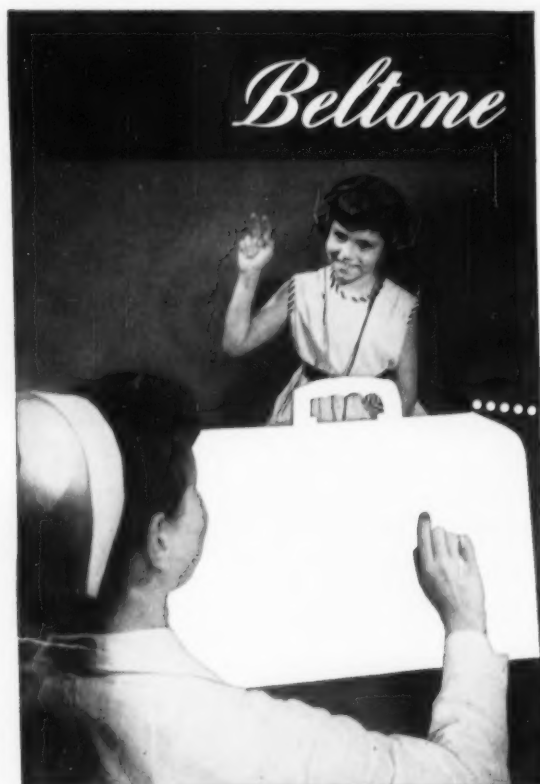
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**A**UTHORITATIVE ESTIMATES disclose that about 3,000,000 school age children in this country suffer from hearing loss. Often neither the children, the parents, nor the teachers realize what is the matter. Symptoms such as laziness, indifference, speech defects, apparent backwardness, or failure to pass grades may indicate that children have defective hearing. And grade repeaters can cost a school a minimum of \$300 per repeater.

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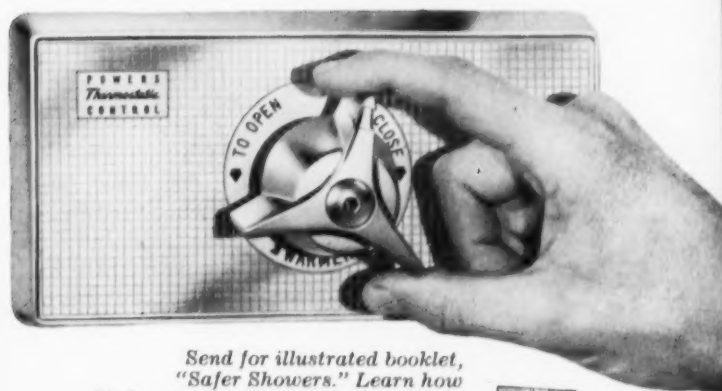
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# N.S.B.A. REPORT

W. A. SHANNON Executive Director N.S.B.A.

## News and Views

### ORGANIZATION AND ACTION PROJECT INITIATED BY THE N.S.B.A.

The National School Boards Association, Inc., has been awarded a grant of \$68,000 from The Fund for the Advancement of Education. This grant will finance a one-year study to carefully analyze the association through its membership to provide a more influential leadership in the solution of educational problems and develop a program of action in such areas as full utilization of schools, use of teachers aides and television in regular instruction, merit pay incentive for teachers, more individual attention to pupils — bringing the curriculum into sharper focus — development of current and reliable statistics as a basis for the solution of educational problems.

#### Study Commission Composition

This project is under the guidance of the N.S.B.A. Board of Directors, composed of 20 officers and directors from as many states. Special consultants who have made extensive studies and are making special contributions in specific areas will be requested to provide the research and facts for the study.

Everett N. Luce, Midland, Mich., is president of the association, O. H. Roberts, Jr., of Evansville, Ind., former N.S.B.A. president and director of the Research and Development Project in 1956, has been selected as Project Co-ordinator.

School boards, as legally responsible laymen entrusted by the general public with the duty to provide policy direction for the public schools of the country, have a peculiar role of leadership to fulfill. They are not limited by training, background, or responsibility to subscribe to any given set of rules for educational improvement. They, therefore, can seek the best methods and techniques for the solution of school problems, in the interest of the children of the United States. This leadership can only be supplied at the national level by a well-informed organization, adequately financed, to represent the beliefs and influence of 250,000 school board members of the country.

#### Approach to Project Activities

It is expected that most state associations of school boards will invite an N.S.B.A. director and staff member to their states to discuss the new project, its goals and program for development, with the state associations' governing bodies. These meetings will be presided over by a director of the national association, with the executive director or project co-ordinator serving as consultant.

These state leadership meetings will pro-

vide opportunities to: (1) discuss illustrations and various techniques for full utilization of school buildings, with suggestions for actual programs, as well as values and barriers to the full use of the school facilities; (2) provide full information on the purposes, limitations, cost factors, and responsibilities of boards and staff to explore the use of such techniques as television and teachers aides; (3) urge creation of test or pilot programs, within each state, for demonstration to school boards, their professional staff, and the public, of comparative illustrations of successful merit or incentive pay plans for teachers — including barriers and limitations, value of, and necessity for merit rating exploration — to obtain full utilization of professional personnel; (4) develop plans and methods of testing, through state school board associations, to determine whether local boards and state associations are effectively using action techniques in the solution of educational problems — in such areas and with such methods as are spelled out in this project.

#### Plans for Publications Testing

A publications advisory committee will be selected, composed of individuals with special qualifications in this field, to counsel with the board and staff in developing a publication medium of professional quality. The purpose and need of such a publication is obvious, if one recognizes that boards of education can take little intelligent action on issues, unless unprejudiced information is provided them.

It is proposed that such a publication

be based on a policy, bold in approach to the problems of education, attacking these problems with every practical solution, as reflects the work and opinion of the nation's school boards and the best results of current research and experimentation.

With the development of such publication or publications, to avoid an ineffective medium, a period of testing for readership among school boards, the education profession, and the public shall be used, with the counsel of the publications advisory committee.

We recognize that school boards in most states are now ready to provide leadership for action in the areas included in this project. Communities throughout the nation will appreciate having new ideas and practices in education, that are supported by documented research, provided for their children and youth without having to wait the usual half century for this to take place.

## Information, Please!

As a service to JOURNAL readers, this section of the N.S.B.A. Report will print questions and problems encountered by schools; other districts, who have had similar difficulties, are encouraged to offer their experiences, by writing to the correspondent. Letters for inclusion in the column should be addressed to Research Director, the AMERICAN SCHOOL BOARD JOURNAL, 400 N. Broadway, Milwaukee 1, Wis.

#### OUTDOOR EDUCATION . . .

We are seeking information on the design of buildings for outdoor education, on program material, and on administrative and legal problems involved.

— Paul Harrison, Lorado Taft Field Campus, Box 229, Northern Illinois University, Oregon, Ill.

#### NUTRITIONAL LUNCH STANDARDS . . .

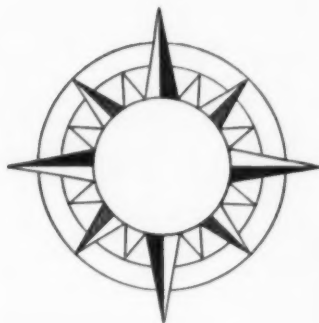
What is being done toward improving the nutritional value of the public school hot lunch program?

— Allison K. Kaufhold, Gill School Committee, Gill, Mass.

The palatial Eden Roc Hotel, Miami Beach, Fla., exhibit headquarters for the 1958 N.S.B.A. Convention to be held April 17-19. Registration tables will be arranged in the Eden Roc adjacent to exhibition hall.



# Are we ready to... *air condition* our school rooms?



which way comfort?

## Nesbitt

...comfort all ways

*Syncretizer* Unit Ventilator

Series *Wind-o-line* System

*Mainline* System

Year'round Air Conditioners:

*Syncretizer* and *Mainliner*  
for classrooms

*Roommate* for offices

*AudiCon* for auditoriums

*Thermovent* Auditorium Ventilator

*Nesbitt* Cabinet Heater

*Sill-line* Radiation

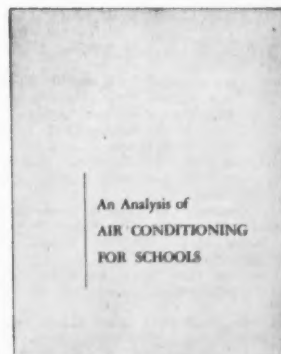
**Are school boards ready?** While many schools have not yet installed an adequate system of heating and cooling by controlled ventilation, many others find such protection indispensable—and even think of adding mechanical refrigeration for cooling at certain times of year. Needs vary in different parts of the country; but wherever school buildings are to be used all year round—and in areas where outside temperatures are often above 60° during the normal school term—a complete system of heating, ventilating, natural cooling, and air conditioning is the only assurance of a comfortable learning environment at all times. Therefore many school executives and board members are giving serious thought to air conditioning in tomorrow's schools.

**Are taxpayers and bondholders ready?** The people who supply the money for public education will have many questions about the cost of installing and operating year-round air conditioning, but the facts will be weighed against the benefits to students and community.

**Are architects and engineers ready?** Is contemporary school building design well suited to the employment of summer air conditioning? What effect upon design will the growing desire for year-round comfort protection have? How best design the system—for installation all at once or in successive stages?

**IS NESBITT READY?** With more than a quarter-century of experience in the manufacture of air conditioning components, Nesbitt is prepared to offer its Year'round Air Conditioners (*Syncretizer* and *Mainliner* for classrooms; *Roommate* for offices; and *AudiCon* for auditoriums). All Nesbitt Year'round units may be installed initially for heating and cooling by controlled ventilation, and the summer cooling components may be added later.

**Are you ready?** Whatever your relation to the school field, you probably have questions: What is involved in air conditioning a school? What are the initial and the operating costs? What must be considered before deciding to install controlled ventilation now and mechanical refrigeration later? These and many other questions are answered in the treatise by Nesbitt engineers, "An Analysis of Air Conditioning for Schools." Mail this coupon for your free copy.

	<p>this free publication will answer many of your questions</p>	<p>JOHN J. NESBITT, INC., DEPT. B PHILADELPHIA 36, PA.</p> <p>Gentlemen: Please send me a copy of your publication, "An Analysis of Air Conditioning for Schools."</p> <p>Name _____</p> <p>Affiliation _____</p> <p>Address _____</p> <p>City _____ State _____</p>
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## ASSOCIATION NEWS

### WERNER AND MALLOCH ON ASBO PROGRAM

William G. Werner, director of public and legal services for the Procter & Gamble Company, Cincinnati, Ohio, will serve as a panelist at the 43rd annual convention of the Association of School Business Officials according to Dr. Charles W. Foster, the group's executive secretary. The convention will be



held at the Roosevelt Hotel in New Orleans, La., October 20-24, 1957.

Mr. Werner, former president of the Public Relations Society of America, will participate in the discussion "How Can the Business Official Effectively Participate in the Schools Public Relations Program?" Tuesday morning, October 22, with A.A.S.A. president Philip Hickey and Everett Luce, N.S.B.A. president. Moderator of the panel will be J. Harold Husband, president-elect of the A.S.B.O.

Very Rev. James M. Malloch, dean emeritus of the Fresno, Calif., Episcopal Cathedral, will conduct the convention's evening Vespers Service address in the Grand Ballroom of the Roosevelt. Dean Malloch, member of the Fresno board of education since 1941, will speak on "When Is a Man Really Educated?"

### NEW BOOKS ANNOUNCED AT NAVA

The case for audio-visual devices—how they can increase the efficiency of teachers and challenge the interest of pupils—was presented for over 2500 a-v specialists at the National Audio-Visual Convention and Exhibit, held July 18-23 at the Morrison Hotel, Chicago.

Of special interest to public schools was the release during the show of two publications which "tell the a-v story to the general public" by the Audio-Visual Commission on Public Information. Last year, the commission published a basic budget yardstick and a minimum list of equipment for an a-v program in public schools.

The two booklets, single copies of which are available from the Commission office, Room 2230, 250 W. 57th St., New York 19, are called "Gateway to Learning"—the story of audio-visual tools and their wide applications in teacher-learning situations—and "Crisis in Education"—a graphic summary of the case for using a-v materials.

### NEW VICE-PRESIDENTS FOR COUNCIL

The Council for Financial Aid to Education recently announced the election of Eldredge Hiller and Dr. John A. Pollard as vice-presidents of the group. Both have been members of the staff, as director of public information and director of research respectively, since 1953, the year when the council was founded by American businessmen to encourage more widespread voluntary support to colleges and universities.

### COMING CONVENTIONS

Sept. 15-17. Council of School Superintendents of New York, at Saranac Inn, N. Y. Secretary: Louis M. Klein, Superintendent of Schools, Harrison, N. Y. Attendance: 800. Exhibits.

Sept. 19-21. Michigan Association of School Administrators at Grand Hotel, Mackinac Island, Mich. Secretary: A. J. Phillips, Box 480, Lansing, Mich.

Sept. 20-21. Connecticut Association of Boards of Education at Reversea Inn, Old Saybrook, Conn. Secretary: Mrs. Herbert A. George, 568 Wilson St., Bridgeport 4, Conn. Attendance: 1500. Exhibits.

Oct. 4. Maine School Boards Association at Portland, Me. Secretary: Joseph A. Aliberti, Rumford, Me. Attendance: 1800.

Oct. 10-12. California School Boards Association, Inc., at Long Beach, Calif., Hotel Lafayette. Secretary: Dr. Lawrence B. White, P.O. Box 891, Long Beach, Calif. Attendance: 1000.

Oct. 10-12. New Jersey State Federation of District Boards of Education at Chalfone-Haddon Hall, Atlantic City, N. J. Secretary: Mrs. Shirley L. Menaker, 514 Greenwood Ave., Trenton, N. J. Attendance: 1500. Exhibits.

Oct. 13-16. County and Rural Area Superintendents at Cosmopolitan Hotel, Denver, Colo. Secretary: Howard A. Dawson, 1201 — 16th St., N.W., Washington 6, D. C. Attendance: 1000.

Oct. 15-18. National Council on Schoolhouse Construction at Milwaukee, Wis., Pfister Hotel. Secretary: W. D. McClurkin, George Peabody College, Nashville, Tenn. Attendance: 125.

Oct. 16. Michigan Association of School Boards at Kellogg Center, East Lansing, Mich. Secretary: S. H. Sisma, Kellogg Center, East Lansing, Mich. Attendance: 600. Exhibits.

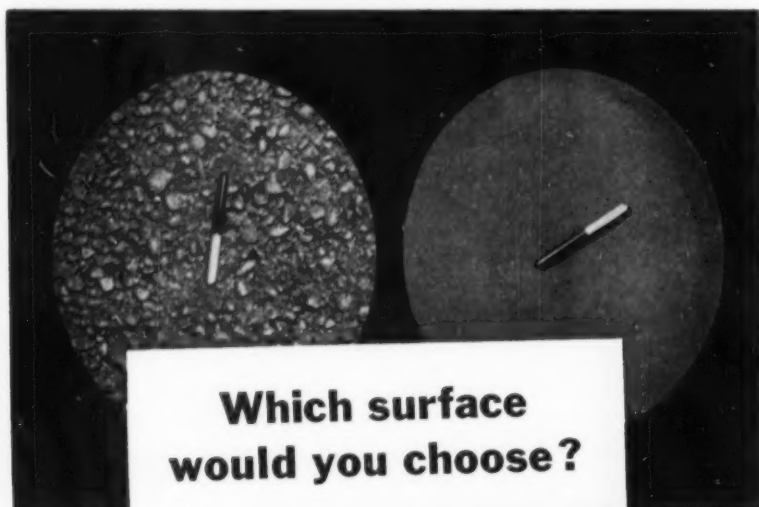
Oct. 18-19. Pennsylvania State School Directors' Association at Penn Harris Hotel, Harrisburg, Pa. Secretary: P. O. Van Ness, Executive Secretary, 222 Locust St., Harrisburg, Pa. Attendance: 1800. Exhibits.

Oct. 20-21. Texas School Boards Association at Driskill Hotel, Austin, Tex. Secretary: Donald G. Hugent, P.O. Box 7721, University Station, Austin, Tex. Attendance: 300.

Oct. 20-25. Association of School Business Officials, at New Orleans, La., Roosevelt Hotel. Secretary: Charles W. Foster, 1010 Church St., Evanston, Ill. Attendance: 2000. Exhibits.

Oct. 23. Vermont State School Board Association, at Montpelier, Vt. Secretary: Mrs. Aline H. Ward, Moretown, Vt.

Oct. 27-29. New York State School Boards Association, Inc., at Hotel Syracuse, Syracuse, N. Y. Secretary: Everett R. Dyer, 170 State St., Albany, N. Y. Attendance: over 3000. Exhibits.



HERE are close-up photographs of the actual surface of a typical play-yard before and after sealing with Walk-Top.® Notice the change from gritty, abrasive, coarse texture to a resilient, smooth and non-skid surface. Which surface would you choose for your play area? There isn't much doubt that you would select the Walk-Top surface . . . particularly when you discover how economically it can be applied over any existing paved area.



Walk-Top smooth, all-weather surfaces give you more "play-days" per year.



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200 Bush Street, San Francisco 20, Calif. • Perth Amboy, N. J. • Baltimore 3, Md. Mobile, Ala. • Cincinnati 38, Ohio • Columbus 15, Ohio • Tucson, Ariz. Seattle, Wash. • Baton Rouge 2, La. • St. Louis 17, Mo. • Inglewood, Calif. Oakland 1, Calif. • Portland 7, Ore. • Washington 5, D. C. • San Juan 23, P. R.



From the American Seating family  
of fine school furniture



This is our No. 534 Lifting-Lid Desk. It is from our Universal line—one of the most popular lines of school furniture in America today.

The widespread demand for this desk is due to its functional design, flexibility and comfort, plus its many built-in features, such as: one-piece Amerex<sup>®</sup> metal-and-plastic top; wide range of adjustability of seat and desk; 45° swivel of seat, both right and left.

But this is only part of the story. So, why not call in the American Seating representative and let him give you the complete story as it applies to your school and your needs? His wide experience in solving school-seating problems is yours for the asking. And he'll guarantee you seating satisfaction at the lowest possible use-cost.

**AMERICAN SEATING** 

**WORLD'S LEADER IN PUBLIC SEATING**  
GRAND RAPIDS 2, MICHIGAN

CLASSMATE<sup>®</sup> SCHOOL FURNITURE • UNIVERSAL<sup>®</sup> SCHOOL FURNITURE • ENVOY<sup>®</sup> SCHOOL FURNITURE • BODIFORM<sup>®</sup> AUDITORIUM CHAIRS • STADIUM CHAIRS  
CHAPEL FURNITURE • FOLDING CHAIRS

Copyright 1957, American Seating Company

Form 6440-5 - Litho in USA



From the American Seating family  
of fine school furniture



No. 53TA



No. 73



No. 60

Here are three more folding chairs from our complete line. Each is designed specifically to meet a folding-chair need. American Seating's wide range of models brings to the folding-chair field the same freedom of choice that has made American Seating a leader in school desks and chairs, and in other public seating as well.

And, American Seating engineers all its folding chairs to excel in durability and safety. So, if you have a need for folding chairs, select, from American Seating's complete line, the model that meets your needs exactly. In this way, and only in this way, all your chairs average out at the lowest per-year cost—combined with the greatest measure of seating satisfaction possible in the folding-chair field.

See these fine chairs for yourself. Compare them with any others on the market and you'll agree: American Seating Folding Chairs are America's best buy! Ask your American Seating man for full details.



WORLD'S LEADER IN PUBLIC SEATING  
GRAND RAPIDS 2, MICHIGAN

Now Goodyear brings to school buses

# NEW, SAFER BITE IN MUD AND SNOW— AND FAR LONGER WEAR!



*Just Announced!*

## New Hi-Miler **XTRA GRIP**

*Tubeless or Tube-Type!*

And it's built with  
**Triple-Tough  
3-T Cord**  
Greatest Truck Tire Saver  
in 22 Years!

**XTRA "BITE"**—up to 35% better traction in mud or snow!

**XTRA CLEANING ACTION**—large open shoulder areas expel mud and snow automatically.

**XTRA SAFETY**—broad, flat tread to overcome weaving; more rubber on road keeps skids at minimum—even on ice!

**XTRA QUIET**—new design counteracts build-up of noise-level.

**XTRA VERSATILITY**—nondirectional tread gives top traction, forward or reverse.

**XTRA MILEAGE**—longest, most even tread-wear of any special service mud and snow tire on market! Try XTRA GRIP and see for yourself.

# GOOD YEAR

MORE PEOPLE RIDE ON GOODYEAR TIRES THAN ON ANY OTHER KIND

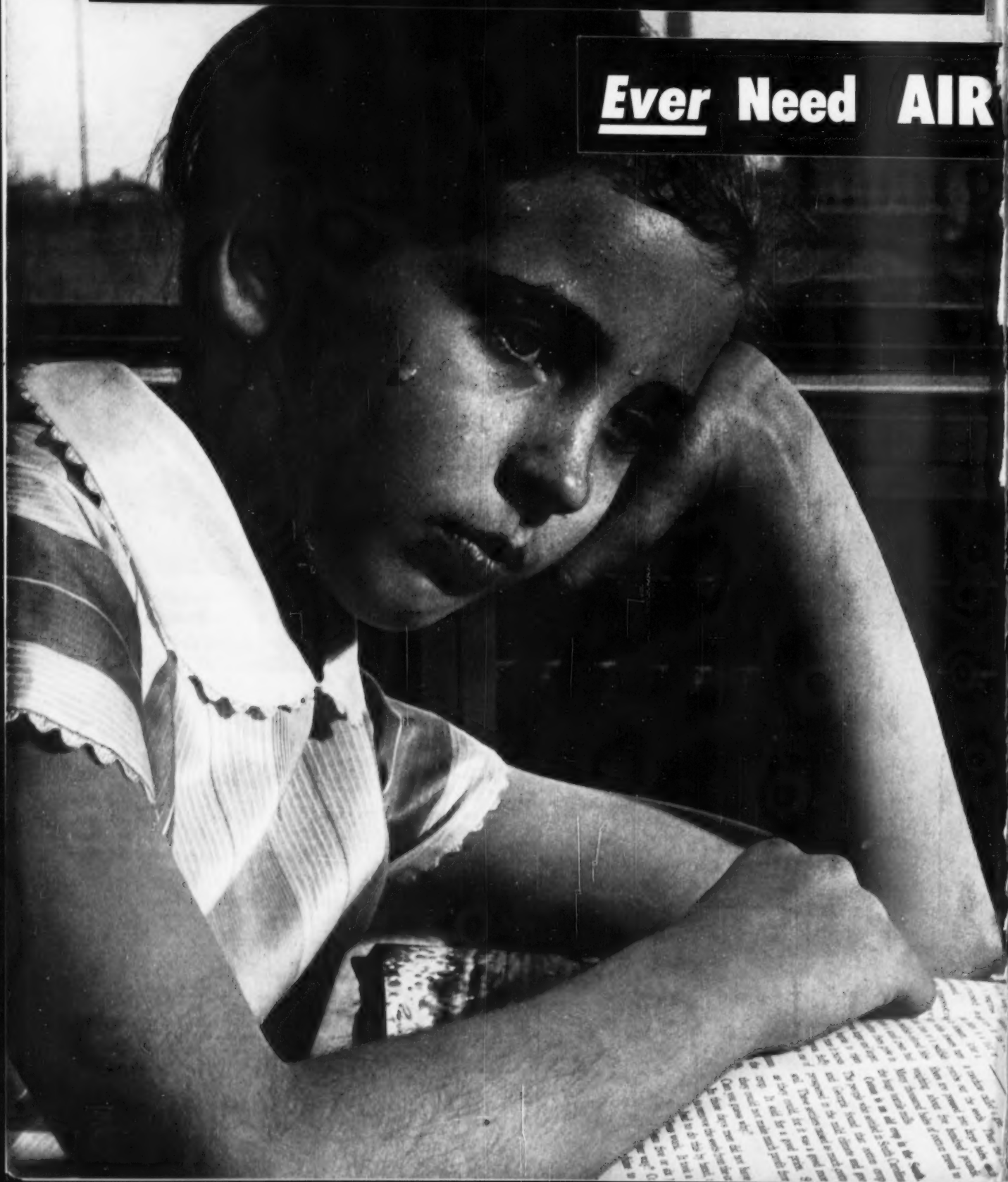
Hi-Miler—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio



Look for this nearby  
Goodyear dealer sign for better  
tire values—better tire care.

**Will The School You Are Planning**

**Ever Need AIR**



# CONDITIONING?

## Plan with the new HerNel-Cool II INSTALL IT *NOW*—AIR CONDITION *LATER*

Nearly every school would benefit from air conditioning *now*—as have offices, theaters, hospitals and homes. Unfortunately, the money to provide it isn't always in the current school budget. The HerNel-Cool II year 'round unit ventilator solves that problem.

These units can be installed now so that the school enjoys all the usual benefits of the famous Herman Nelson DRAFT|STOP system—heating, ventilating, natural cooling (with outside air), and control of window drafts. Only the addition of a chiller in the boiler room is needed for complete hot weather air conditioning.

It can be provided initially or at any future time. When it is wanted, air conditioning can be secured without disruption . . . and without expensive alteration and installation charges.

### HOW THE SYSTEM WORKS

HerNel-Cool II units provide individual temperature control for each room, automatically. Most of the year they provide heat, ventilation, or natural cooling (with outside air) as the room requires. When a chiller is installed in the boiler room, HerNel-Cool II units also function as air conditioners.

In hot weather, the units switch automatically to mechanical cooling, with chilled water circulating in the same piping that carries hot water during cold weather. The cost is far less than separate heating and air conditioning systems—both for installation and operation.

Would you like more information? Just write to Herman Nelson Unit Ventilator Products, American Air Filter Company, Inc., Louisville 8, Kentucky.

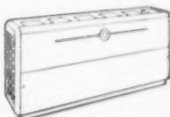
**AAF**

*herman nelson*  
UNIT VENTILATOR PRODUCTS

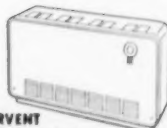
**AMERICAN AIR FILTER COMPANY, INC.**

System of Classroom Cooling, Heating and Ventilating

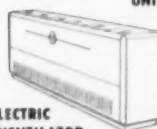
HOT WATER OR STEAM  
UNIT VENTILATORS



AMERVENT  
FOR MILD CLIMATES



ELECTRIC  
UNIT VENTILATOR



UNIVENT GAS FIRED  
UNIT VENTILATOR



**ANY FUEL, ANY CLIMATE—There is a Herman Nelson Unit Specifically  
Designed to Give You More Classroom Comfort Per Dollar**



10,000,000 youngsters ride school buses daily . . .

## DODGE SCHOOL BUS CHASSIS

will help you protect  
yours at lowest cost!



You get an extra measure of safety for your school children with a Dodge *Power Giant* School Bus chassis.

Dodge school bus chassis meet or exceed all N.E.A. safety codes and provide practically every protection engineers can devise. For example: the independent parking brake can be adjusted right from the driver's seat . . . maximum braking power always at your finger tips. Gear-before-axle steering linkage provides easier, safer steering control as well as sharper turning. Independent headlight circuits give extra protection against lighting failure.

You save on operating costs with Dodge, too. Chassis components are oversized or reinforced at points of wear for longer life. And Dodge *Power Giant* engines, both V-8's and Sixes, give you premium performance on regular gas.

Why not check all the facts with your Dodge dealer now. Let him show you why Dodge *Power Giant* school bus chassis is your best buy.







Premium features like these are standard  
on every Dodge School Bus Chassis



- Sharp turning, easiest steering for better maneuverability
- Independent headlight circuits
- Weatherproof 12-volt electrical system assures dependability
- Independent parking brake, adjustable from driver's seat
- Self-energizing rear brakes
- Rugged frame, double-width front crossmember
- Tubeless tires

# ***Dodge PowerGiant*** School Bus Chassis

Choose from 6 Dodge School Bus Chassis for bodies accommodating 30 to 66 passengers. Max. G.V.W.'s from 10,500 to 21,000 lbs.

					
MODEL S400-153" WB. 10,500 and 12,000 lbs. G.V.W. for 30 and 36 pupils.	MODEL S500-193" WB. 15,000 and 16,000 lbs. G.V.W. for 48 pupils.	MODEL S500-217" WB. 15,000, 17,000 and 18,000 lbs. G.V.W. for 54 pupils.	MODEL S600-236" WB. 16,500, 17,500 and 20,000 lbs. G.V.W. for 60 pupils.	MODEL S700-236" WB. 17,500 and 21,000 lbs. G.V.W. for 60 pupils.	MODEL S700-254" WB. 21,000 lbs. G.V.W. for 66 pupils.





Above:

Hyde Park School, Waukegan, Illinois.  
Architects, Ganster & Hennighausen,  
Waukegan. Photo by Bill Hedrich,  
Hedrich-Blessing, Chicago.

Below:

Commercial High School,  
North Chicago, Ill.  
Architect, Warren S. Holmes Co.,  
Lansing, Mich. Photo by Hube Henry,  
Hedrich-Blessing, Chicago.



## PLAY SAFE

with your school dollars  
...with your pupils



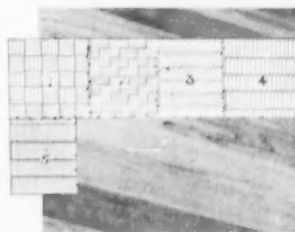
## NORTHERN HARD MAPLE

Surely one may accept as valid the earnest advice of coaches and physical education authorities, regarding gymnasium and multi-purpose floors. That's why we polled hundreds of them. Practically unanimously, they said: "Maple, by all means!" Their reasons? Maple is *resilient*—has a "live" rather than "dead" feel underfoot. It is *bright, scuff-resistant, splinter-free*. Painted court lines contrast clearly, greatly aiding players' *peripheral vision*. Its tight grain repels dirt; smoothness minimizes floor-burns and infections. "Shin splints" (bane of trainers!) are far fewer. And—MAPLE ENDURES! With simple maintenance it will outlast the building, since "there's always a new floor underneath." The **MFMA** mill mark guarantees dimension, grade, seasoning, species. Specify it confidently.

**MAPLE FLOORING MANUFACTURERS ASSOCIATION**  
Suite 588, Pure Oil Bldg., 35 E. Wacker Drive, Chicago 1, Ill.

See  
Sweet's

(Arch. 13j-MA) for full  
technical data. Write  
for AIA File Folder  
and newest official  
MFMA listing of  
floor-finishing systems  
and materials.



A vast variety of beautiful decorative effects easily obtained in Maple—in blocks and patterned designs as well as the conventional strip of various widths. Readily laid in mastic, over concrete or softwood sub-flooring.

POWERS Type-IC  
Pneumatic  
Thermostat

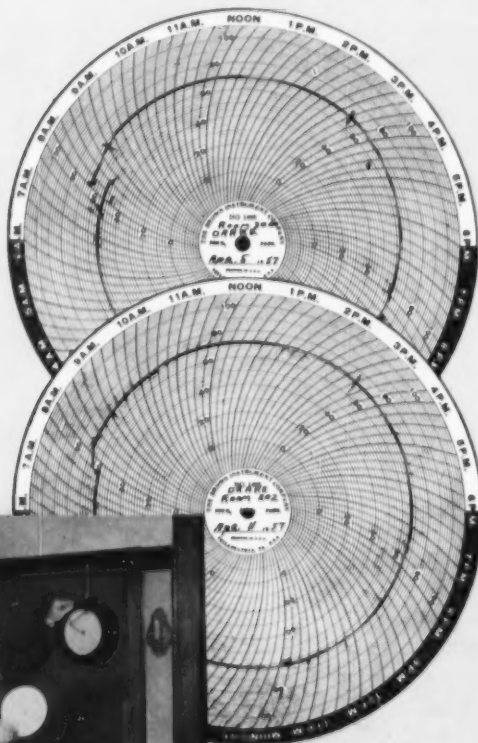


**in 1901**

The old DRAKE SCHOOL, built at the turn of the century, was one of Chicago's best. It is located in the famed Prairie Avenue district and was completed in January 1901. Temperature of the forced warm air heating and ventilating was regulated by a

**POWERS** gradual acting Pneumatic Control System

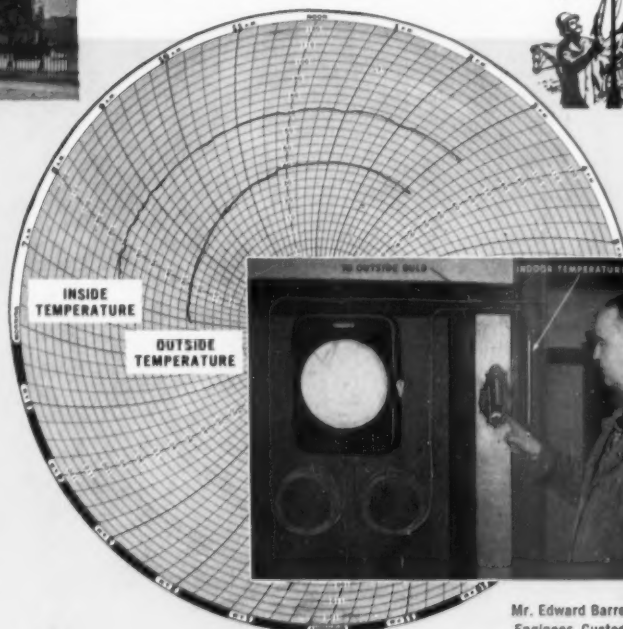
Like earlier Powers systems installed in Chicago's schools, in 1895-96, the thermostats in each room were unique. Their Gradual action in controlling the mixing dampers that supplied tempered air to each classroom was a decided improvement over positive-on-off type of control widely used at that time.



Mr. George Casey, Engineer-Custodian.

## Since the Gaslight Era...

56 Year Old Powers Control System still gives dependable performance shown on temperature charts below



Mr. Edward Barrett,  
Engineer, Custodian

**in 1950**

On its 49th Birthday recording thermometer charts like the one above showed the good control obtained with this old Powers system.

**in 1957**

On its 56th Birthday—still not acting its age—Powers control produced temperature recording charts like those at the left. All charts on this page were made in rooms regulated by Powers Type IC Pneumatic Thermostats.

**Will the Temperature Control Systems You are Specifying or Buying Today give better, or as good control as this 25 to 50 years from now? Users of Powers control report such performance with low cost for upkeep.**

**Taxpayers**

get their money's worth. The charts show **No Fuel is Wasted** due to OVER-heating. Dependable Powers Control combined with the maintenance program of the Chicago School system team up to provide greater classroom comfort, fuel economy and performance records like the one cited above.

• Only two of many Chicago schools controlled by Powers are illustrated here.

...Chicago Taxpayers benefited from the Economy of

# POWERS quality systems of Pneumatic TEMPERATURE CONTROL



SKINNER ELEMENTARY SCHOOL, CHICAGO



**Benjamin C. Willis**  
General Supt. of Schools  
**Edwin A. Lederer**  
Associate Supt.  
In Charge of Operation Services  
**John C. Christensen**  
Asst. Supt. in Charge of  
Architecture  
**Schmidt, Garden & Erikson**  
Associated Architects on  
Skinner School  
**Thomas J. Brett**  
Asst. Supt. in Charge of  
Plant Engineering

## The NEW and FORWARD LOOK in Chicago Schools is exemplified by the new colorful Skinner School

**A Favorable Environment for Learning.** Located in a drab old neighborhood the pleasing use of colored glazed brick and other materials for exterior and interior, plus many contemporary features, helps teachers operate at peak efficiency and aids pupils desire for learning.

In This Well Designed 35 Room School are 26 classrooms, two kindergartens, library, lunch room, home economics, clinic and adjustment rooms, gymnasium and offices.

**Powers Control Provides Thermal Comfort and Fuel Economy.** Thermostat in each room regulates reheat coil in ventilating duct. Forced hot water heating in concealed finned radiation is controlled by a Powers MASTROL system.

**Are you Planning a New Building?** Ask your architect or engineer to include a Powers Quality system of pneumatic control. You'll help insure utmost comfort, fuel economy and lowest cost for upkeep.



(C40)

## THE POWERS REGULATOR COMPANY

SKOKIE, ILLINOIS

Offices in Chief Cities in U.S.A., Canada and Mexico  
See your phone book

Over 65 Years of Automatic Temperature and Humidity Control

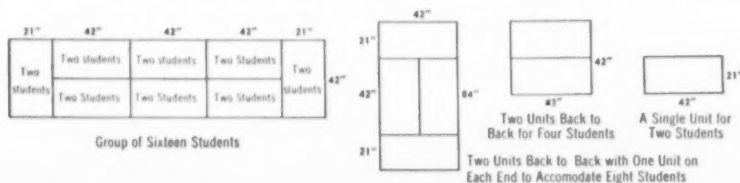




## WELL SUITED TO EXTRA CURRICULAR ACTIVITIES!

Here's American Desk's handsome Airplane Table with the No. 44 Cluster chair. *One* versatile unit designed to serve the changing needs of *active* elementary classrooms! Can be easily combined to form large work surface . . . or quickly lined around walls to provide maximum floor space. Large work area . . . generous book storage space. Tops of maple, birch or Fibre-plastic, sizes 21" x 42"; 21" x 48"; 24" x 48".

*Metal Colors: Como Blue, Coppertone, Sky Blue, Seafoam Green, Light Taupe.*  
*For Competent Assistance, Complete Details, Ask Your State AD Representative*



*american desk*  
 MANUFACTURING COMPANY TEMPLE, TEXAS



# Merit Rating on Trial

**Would merit rating  
improve the teacher "situation"  
in your schools?**

To help board members and administrators in local school districts answer this question, here is a summary of the basic arguments for and against the plan — presented in a form that could serve as a basis for discussion of the subject.

## For the Prosecution

The NEA Department of Classroom Teachers defines merit rating as the "subjective judgment of a teacher, made administratively by one or more persons, with or without the knowledge of the person rated, for the purpose of determining salary." The case against merit rating, thus defined, hinges basically on the argument that a *just* evaluation of teaching effectiveness is extremely difficult, if not impossible.

### Determining Fair Evaluation

In the evaluation of teaching, the questions of *what should be evaluated* and *who should evaluate* must be answered to the complete satisfaction of all groups involved before a successful salary schedule with merit rating provisions can be realized.

Since "learning," according to Dr. Vander Werf of Northeastern University, writing on "The Evaluation of Teaching" (pp. 27-30, Oct., 1956, *SCHOOL BOARD JOURNAL*), "the teachers' stock-in-trade, is at least as complex as any other process in which human beings are involved," the answer to what should be evaluated is not "cut-and-cried," and perhaps must be "at best a compromise."

Pupil growth is generally proposed as the fundamental criterion of teaching efficiency. If this is accepted, what provision in rating for salaries would be made for the excellent teacher in a difficult instructional situation? In the classroom, social services to human being (plus the entire, illusive field of "concomitant" learnings) consist of many,

## For the Defense

The incorporation of bonuses into teachers' salary schedules as rewards for superior performance represents a major step toward improving the present teacher "situation" — low teacher salaries and the inability of the teaching profession to attract and hold outstanding teachers.

### Substantial Salaries

On the community level, more and more taxpayers are resisting with growing vigor the annual spiral of teacher salaries.

Generally, this resistance is not because they are opposed to higher payments for good education (periodically, a majority of these taxpayers approve huge outlays for school buildings). This resistance is not opposition to paying the price of effective, satisfied teachers for their children. But, from contacts with their children's teachers, they are acutely aware that there are differences in abilities in teachers. They realize that not all teachers deserve to be paid the same high maximum.

And these taxpayers are becoming increasingly aware that our present system of across-the-board teacher pay boosts makes no provision for encouraging industrious, conscientious teachers. They know these blanket salary raises discourage, in effect additional effort on the part of many teachers for increased proficiency.

The school district, therefore, that utilizes the merit rating clause guarantees the taxpayers that, while all teach-

## Position of the NEA Defined—

"Use of subjective methods of judging the quality of teaching performance in setting teachers' salaries has a deleterious effect on the educational process. The making of such judgments (commonly known as Merit Ratings) creates dissension which upsets the school. It destroys professional relationships and morale, causes strife between teachers and administrators, and leads to deterioration in the quality of education. Plans which tie teachers' salaries to such subjective ratings are to be vigorously condemned."

— 1957 Convention Resolution.

important intangibles which contribute greatly to the education of the whole child. How can these be measured? How can a teacher's success with these services be fairly evaluated and rewarded? The art of teaching, with all its interrelated aspects, defies concrete pinpointing of over-all success and failure.

If teachers are to be evaluated for placement on a scale of effectiveness for salary purposes, however, there must be an agreement as to what should be evaluated; moreover, objective and accurate means must be agreeable and usable to measure *what should be evaluated*.

### Who Should Evaluate?

The second basic consideration of evaluation—who shall evaluate—also presents major obstacles to incorporating the merit rating clause in teacher salary schedules.

These conformities would force a stereotyped approach to teaching, harmfully conditioning teacher attitudes. These conformities would repress experimentation, adaptation, origination. The teacher would not feel free to teach according to her convictions with the needs of her individual students in mind since the progress of her salary hinges upon acceptance by the evaluation committee.

In addition, what guarantee is there that the evaluators would have enough time and have enough training to do a good job of evaluating?

The utilization of evaluators of teaching and teachers for salary purposes would give rise, in addition, to all the abuses associated with the term of "apple polishing." As a retired teacher wrote to a midwestern city daily newspaper, "'Merit' pay scales put a premium on 'handshaking,' 'fence mending,' and pressure politics in the schools. The teacher who modestly but steadily and efficiently goes about his work gets nowhere. On the other hand, the teacher who can talk a good job or help the superintendent fix his roof can go far."

How can the human elements of bias, prejudice, and personality be divided from the evaluation process? The elements must be to achieve any degree of fairness.

### Destroying Teacher Professionalism

Past experiences indicates merit rating tends to destroy teacher professionalism.

Teachers, as competitors for superior status rather than as colleagues, will hesitate at sharing ideas and growing to-

ers are receiving higher salaries, the best teachers are receiving the best salaries. It proves to them that at least a portion of their increased school tax dollars are improving their school by rewarding hard-working teachers rather than perpetuating our present indiscriminate system of "equal pay for any kind of performance."

### Attracting and Holding Good Teachers

Merit reward, as a supplement to a fair, general salary schedule, would be a highly effective instrument to compete with industry for the services of superior man power.

Teachers' groups have for years given at least lip service to the need for enlisting intelligent high school graduates into the ranks of teaching. They have also cried for the means to snatch back from industry the teachers lost because of inadequate teaching salaries.

If the ambitious, intelligent student, when selecting a career, knows that as a teacher, he will be compensated according to his effort and ability (as well as his training and experience), he will have no reason *not* to consider teaching on equal grounds with accounting, selling, engineering, etc. He will be assured that teaching will offer him a good salary commensurate with skills and effort, just as the professions and industry do.

And how many proved teachers, who have left (and are leaving) teaching because of its inability to help them make ends meet, would return once they know they would receive an equitable salary based (as industry bases its salaries) on a combination of ability, effort, experience, training, etc?

### A Boost for Professional Status

Teachers' groups have long fought for labor-union type benefits of tenure security and automatic annual increments. At the same time, they have not been willing to relinquish their drive for recognition of the teaching as a profession.

## 7 Commandments for Your Merit Plan—

1. Do not develop plans to pay better teachers higher salaries with the expectation that they can reduce the over-all budget for teachers' salaries. Expect higher cost to the district in return for better teaching.
2. Pay all teachers salaries that are competitive with those offered by business and industry before expecting teacher support of rewards for professional competence.
3. Enlist the support of teachers and administrators in formation and operation of your merit rating plan.
4. Let elected committees of teachers help administrators evaluate professional competence.
5. Try adding extra pay provisions to already established good salary schedules as a simple and effective way to reward good teachers.
6. Provide extra pay raises for good teaching to a fairly large proportion of the teaching staff (60 per cent).
7. Remember that no single pattern of rewarding professional competence will fit all school systems.

— Dr. Lindley J. Stiles

Dean, School of Education  
University of Wisconsin.

gether. Jealousy and suspicion will replace the co-operative team approach. Teachers will look upon administrators as inspectors rather than as leaders and consultants, their

### Your Merit Plan Must Assume That—

1. The merit principle is psychologically sound, socially just, and culturally prized.
2. Teaching can be precisely defined and objectively measured.
3. After it has been defined and measured, teaching can be evaluated as more or less desirable.
4. Teachers can accept and profit from evaluations of their work based on objective measurement of performance.
5. A salary program which recognizes important individual differences in effectiveness of can be fairly administered.

— Utah School Merit Study Committee,  
Mr. Gale Rose, Secretary.

productive relationships deteriorating. Whatever co-operation between teachers and administrators would continue to exist in the merit rating area would be forced, unproductive, and undemocratic.

In addition, as beginning teacher salaries are low in comparison with starting salaries in other professions, and raises are not now frequent or substantial enough, the professional status of the teacher, and her minimum professional fee, is further curbed.

### Teaching and Industry: Incompatible

The presumption that, since merit rating in various forms has proved acceptable in industry, it can work in teaching is not valid. In education the raw materials differ greatly in all aspects and cannot be controlled in the same manner as in manufacturing a product. The emotions and human values, mentioned above, enter into the substance of teaching and the teaching process; these cannot be controlled and measured, as in an assembly line arrangement.

### Teacher Morale

In conclusion, the adoption of merit rating principles in teacher salary schedules is no guarantee for the improvement of teaching effectiveness or of the quality of instruction in the schools.

A retrogression to the "horse trading sessions," before the salary schedule evolved, it would adversely affect teacher morale by giving place to too many abuses resulting especially during the subjective evaluation process. A poor substitute for better orientation programs, long-ranged in-service training, improved supervision and classroom environment, merit rating is much too frequently looked upon by administration as a device toward controlling instructional costs by cutting teacher salaries. To many teachers, merit rating's strongest spokesmen seem to conceive it more as a means of withholding the slightest salary progress of "poor" teachers rather than raising "superior teachers."

A comparison is made, as an example, between teacher salaries and the salaries of "other professionals."

Members of these professions, however, are subjected, as Peter C. Jurs, reported to his Oakland, Calif., board to a most severe form of merit rating: evaluation and compensation by their clients. Doctors and lawyers today are not guaranteed a continuing and increasing salary for any quality of effort; they are, in fact, bound to improve their competence year after year, or their income will sharply decline.

If teachers wish to receive salaries broadly equal in amount to "other professionals," they should be consistent and expect to have their salaries adjusted in the manner other professionals' salaries are: by merit and not in a regimented, individual-less, production-line fashion.

As James W. Whitehead, executive secretary of the Massachusetts Association of School Committees, Inc., stated at the recent AASA convention; "The time has arrived when teachers must make up their minds whether they want to be a labor union or a profession: whether they desire 'equal pay for equal work' or will encourage 'better pay for better teaching.'"

### Evaluation Today

As the differences between the conscientious, efficient teacher and the "9-to-4" teacher are now easily recognized, teachers are being evaluated today.

Our present system of promoting teaching personnel (carried on within a framework of co-operatively professional competition) to department heads, principals, supervisors, etc., indicates some form of professional appraisal and recognition is now being carried on with little criticism. Principals and supervisors must be aware at present of the differences between performances of their teachers and their individual merits and weaknesses, if they hope their supervisory programs are to be effective.

All that remains to do is to define these specifications for evaluation and relate them to teacher's salaries.

Who can define these criteria? The National Education Association, with its high-powered agencies (so eminently successful in research in other aspects of this area) should have little trouble defining what L. P. Morris, Elmwood Park, Ill., board member, has called "a system of co-operatively developed and organized professional proficiency appraisals to aid in the evaluation of the subjective factors of teaching effectiveness" (especially as they have formulated such equitable, practical criteria for rating teachers before they are rewarded with tenure). They are probably interested in pinning down these criteria as a means to helping their members grow professionally by knowing what practices constitute superior instruction.

Who shall evaluate? Present, successful practice indicates that a combination of three or four teachers, a principal or supervisor, the superintendent, and a board member ideally comprise the evaluation committee. Certainly, the easiest selected segment of this committee should be the delegation of several members of the local teachers' association (with the membership's full support), as our contemporary teachers' groups must include many individuals of unquestionable integrity.

### The Need for Justice

In the swing away from the individual teacher salary bargaining sessions of past years, teachers and their "lock-step" salary schedules have accepted the "lowest common denominator" in their salaries. In their effort to protect their "weak" associates, they have abused their superior performers.

Merit rating, as an extension of the base for paying teachers, is an injection of vitality for the profession and the greatest single step forward toward their advancement that teachers could take.

The public schools, neglected for too long by so many business and industrial leaders, are now to receive more attention than has been given at any recent time. Brig. Gen. David Sarnoff,<sup>1</sup> chairman of the board of the Radio Corporation of America, has proposed that the industries release annually some of their engineers to teach mathematics and science in our high schools. The proposal may have merit, but from a long-range viewpoint, it would seem to be better to provide adequate compensation to teachers so that the differential between teachers' pay and industrial pay will be such that a choice between teaching or a career in engineering will be made on the basis of interest in the work rather than in the amount of pay. Industry has been syphoning off potential teachers to staff industrial needs. This is accomplished by offering what seems to teachers fabulous beginning salaries in industry. Recently, a college placement official said the highest pay is going to engineering seniors, business majors are second, and liberal arts students, third.

In 1953, a Drury high school graduate completing her junior year at the University of Massachusetts and majoring in physical chemistry was interviewed by recruiters from several industries. She was offered a starting salary of \$4,500 to begin one year later. While she was being offered \$4,500, the head of the high school science department under whom she had received her basic science preparation was receiving \$4,400—this, after 34 years of teaching, including 20 years as head of the Drury science department. Unless business and industrial leaders correct this outrageous social and economic injustice, there can be little hope for providing the trained science and mathematics teachers needed to staff our schools, and thus there can be little hope of providing an adequate supply of trained scientists so desperately needed in the United States today.

### Challenge to Business and Industry

Joseph P. Spang, Jr.,<sup>2</sup> chairman of the board of directors of the Gillette Safety Razor Company, in a speech to his business colleagues, emphasized the need for business and industry to take a more realistic and unselfish view toward meeting these needs of the education profession either by direct subsidy or by taking a more active part in stimulating the source of funds needed in public schools. An honest and sincere effort must be made to help secondary schools and colleges find the scientists. Some effort has been made by business and industry to help the colleges pay adequate professional salaries and to provide adequate housing and equip-

ment. The work of the Ford Foundation this past year is an example of this type of help at the college level. However, it is the high schools that have been shamefully neglected both by local industrial and business leaders. If it is good for industry and business to help colleges, why is it not just as good to expend adequate effort in helping the local high schools where the seeds are usually planted for the creation of interests in scientific careers, and the basic foundation is laid for the study of science in college.

On a recent television program, Joseph Reilly, chairman of the Recreational Commission of the National Association of Manufacturers, stated that 850 million dollars has recently been expended by their members on recreational facilities for their workers. No one would argue that this money has not been well spent, but we wonder if the same people being helped in their recreational interests would not appreciate as fully some attention to improved educational facilities for their children. It has been our observation that most parents place education far ahead of recreation.

### Colleges Fare Better

In a New England college town, where the college now charges \$800 tuition per year and which admittedly represents only one half the true cost of educating each student, the college has found it necessary to make up the other \$800 from earnings on endowments. In this town, the high school tuition rate is \$383 per year. The college officials report that they believe high school education is basic and very important, yet they criticize their own high school even though they are satisfied to provide only one fourth the amount of their college tuition for the education of each high school student.

In this same town, college instructors' and professors' salaries range from \$4,000 to \$10,000. In addition, the professors receive such fringe benefits as sabbatical leave and an exchange scholarship plan to assure college education for their children. The high school principal, with 30 years experience, is paid \$5,950 per year and has no fringe benefits. The high school teachers' salaries start at \$3,050 for a bachelor's degree and may reach \$5,400 after 20 years' service with a master's degree. Most college teachers work 12 hours in the classroom, while high school teachers work 25 hours. The college has a \$9.5 million plant, while the public high school has a plant worth approximately \$3.3 million. The college has a \$17 million endowment, while the high school has to depend entirely on local real estate taxes. The point is not to do less for the colleges but to do more for the secondary schools to provide basic knowledge and skills.

The average cost of \$350 per pupil per year for high school education is much less than the yearly cost for college education.

### Needed: a Boost for Science —

Helping the high school provide  
excellent teachers . . .  
making certain that sufficient  
funds are available to equip  
science laboratories . . .  
serving on school boards and  
committees: these are the  
ways that —

# Industrial Our

If the need for scientists in the United States is to be met, business and industry will have to provide the leadership necessary to step up the opportunity for training in science and mathematics on the secondary school level.

A recent survey by the Carnegie Institute of Technology revealed the fact that industry has been placing the blame on secondary schools for the current shortage of engineers. The survey indicates there are 2391 graduates with bachelor's, master's, or doctor's degrees out of a total alumni of 11,500 engaged in engineering. Industry will have to take full responsibility for this loss of scientific man power. It would be most helpful in this critical period if industry would stop passing the buck and concentrate on passing the "bucks" for public school scientific education. It would help if high level industrial and business leaders served on school

<sup>1</sup>Hechinger, Fred M., "Outline of Sarnoff's Plan for 'Educational Service,'" *New York Herald Tribune*, January 29, 1956.

<sup>2</sup>Cunningham, Bill, "Youth of U. S. No. 1 Problem," *Boston Herald*, May, 1956, a report of a speech on May 1, 1956 by Joseph P. Spang, Jr., to the Poor Richard Club in Philadelphia.





A most effective example of school-industry co-operation in science teaching is the jointly-sponsored science fair.

Pekin's (Ill.) unites the student, the schoolman (Mr. Virgil C. Dollahan, center), and the industrialist (Mr. Robert Culsaw). Details of this fair are on page 33.

# Leaders Can Improve Science Programs

ROBERT N. TAYLOR and WALTER G. PATTERSON

boards and Citizens' Committees for the Public Schools. Government and industry need not fear subsidizing the programs in this area since a large part of our present federal budget is now devoted to subsidizing air lines, shipping companies, farmers, foreign student exchange, and many others.

## Needed: A Balance

There is a real danger, however, in the emphasis now being placed on the sciences and mathematics. Eager, well-meaning, but ill-informed advocates would have us believe that other subjects in high school are unimportant or of less value than science or mathematics. Scientists, narrowly trained, may be socially dangerous and thus less fully effective as teachers and workers. We need scientists who are also well grounded in the humanities. They need the balance of moral and ethical prin-

ciples of conduct. We are greatly concerned about our well-prepared students who go to outstanding technical schools and become members of unstable groups who ridicule religion, morals, and our accepted way of life. We need not only more emphasis on science and mathematics, but also, a greater effort in the other disciplines such as English, history, economics, and languages.

Mr. Taylor is superintendent of schools in North Adams, Mass., and Dr. Patterson, formerly principal of Drury high school there, is now principal of the Needham, Mass., high school.

The 75,000 members of the American Chemical Society have been asked to help in strengthening "our educational system as a whole." In the May, 1956, issue of

*The Educational Forum* the Society states that the elementary schools can do better in providing "important initial training in science and mathematics needed as a foundation for secondary school education and for understanding of the technological age in which we live." They ask that the secondary schools make greater effort to provide sound preparation for college and urge all students capable of higher education to pursue the college curriculum. In addition, they ask that those not preparing for higher education also pursue studies in science and mathematics, and finally, they request that colleges and universities "increase their efforts to provide an adequate flow of qualified graduates in science and engineering to supply the needs for uninterrupted growth of technological development." In other words, the Society believes that, "it is desirable that the voters of tomorrow possess some understanding of science."

Educators have not been blind to the need for broader science training in the elementary schools. During the many years of our experience, we have noted that science training in modern schools really starts in the kindergarten. Our investigation also reveals that there is not less emphasis but as much and probably more emphasis on science and mathematics in the best public high schools than ever before. The by-word in educational circles since the end of World War I has been, "We Live In A Scientific Age." Educators have recognized this and have expanded the program of science teaching so that certain elements are now found from kindergarten through grade eight in all well organized public school systems.

## How Drury Emphasizes Science

Although some high schools in the United States still do not offer science courses, Drury high school has, for the past 65 years, offered an adequate program in science education. Writing in 1891, the principal of the high school, Mr. Eaton, reported, "no intelligent person will deny that changes in educational subjects and methods are required by the changed conditions of public and social life, also by the vast increase in scientific and linguistic knowledge." New subjects were introduced into the school because the New England colleges were about to demand for admission some knowledge of science; such as, elementary physics, elementary physiology, and physical geography. The science courses in 1891 were offered to meet college admission and for general education for those going no further than high school. With the introduction of three sciences, one term of German was eliminated. In 1891, Yale was the only college requiring German for admission to the classical course. The scientific course in addition to preparation for colleges, such as Smith, Wellesley, and Yale, was considered a good general course. Today, the five terms of French or

German, mathematics through trigonometry, and a term of astronomy and one of zoology seem to be very strict requirements for a general course. In 1916, Superintendent Isaac Freeman Hall wrote in his annual report, "in the course of study very important changes have been made during the last 20 years in science. No laboratory was offered 23 years ago. A small laboratory was fitted up at Drury in 1896 which was very much improved and enlarged in 1902. When the new high school is finished, one entire floor will be given to laboratory work in chemistry, physics, botany, biology, geography, etc." The building referred to by Mr. Hall was completed in 1917 and has been used continuously since that time.

Now, the science offerings include general science, biology, physics, and chemistry with provisions for all students. As a background for the study of physics and chemistry, mathematics courses include beginning algebra, intermediate algebra, plane geometry, trigonometry, solid geometry, and advanced algebra; the latter course includes a review of all high school mathematics plus an introduction to college algebra.

#### Science Enrollment Compared

The percentage of pupils enrolled in science courses in Drury high school is above the percentage enrolled in the Commonwealth of Massachusetts. The enrollment in science has increased from 37.8 per cent in 1930 to 57.8 per cent in 1955 in Massachusetts, while in Drury high school the percentage has increased from 68.9 per cent to 76.6 per cent. Since high school enrollment and holding power have also increased during the same years, it would seem that a much larger group of graduates now enter industry and college with a background of science than was true 25 years ago.

General science has shown a slight decline but the percentage is still in excess of the Massachusetts figures. In 1930, 28.2 per cent was enrolled in Drury general science as compared to 22.2 per cent in 1955. In 1930, 11 per cent was enrolled in general science in Massachusetts which increased to 19.5 per cent in 1955.

Biology has been a popular subject with 19.8 per cent enrolled in 1930, and 23.6 per cent enrolled in 1955. This compares favorably with the Massachusetts enrollment for the corresponding years of 9 per cent and 19.4 per cent.

Physics has shown no increase in Massachusetts during this atomic age. The same percentage, 7.3 per cent, was enrolled in 1930 and in 1955. In Drury high school, 2.1 per cent was enrolled in physics in 1930 with an increase to 10 per cent in 1955. This should increase the potential of engineering candidates in this area.

In Chemistry 10.5 per cent was enrolled in Massachusetts in 1930, and 11.7 per cent in 1955. In Drury high school, the per-

centage taking chemistry increased from 8.9 per cent in 1930 to 19.1 per cent in 1955. The record indicates a steadily increasing trend that is somewhat in excess of the state percentage.

Our record shows that Drury high school is now making a superior contribution to science education. In the decade, 1926 through 1935, the average percentage of students enrolled in science courses was 65.9 per cent. In the next decade, 73.2 per cent was enrolled. In the past decade, 1946 through 1955, the average percentage enrolled in science increased to 74.6 per cent.

In 1930, there was a significant increase in the number of students studying science. Our study showed that a new head of the science department came to Drury at that time. He told us that he staffed the department with outstanding science teachers, and the students "flocked" to these good teachers. If this is true, and we believe it is, other departments should also have outstanding heads and teachers. Industry places men in charge of a small number of workers to obtain results. Yet, how many times do the same industrial leaders, while working on school boards, deny in the name of economy the appointment of the heads of departments in their schools. In industry heads of departments are good business and provide for efficiency, but in public schools, heads of departments are a waste of the taxpayers' money. We rightly need a new look into this problem.

#### Survey of Student Scientific Interests

Criticisms and opinions concerning science education in the high schools have been given with increasing frequency by industrial leaders and college officials. In addition, we believe that impressions and evaluations by the high school students themselves would make a valuable contribution to our knowledge of the influences that motivate for and against scientific training at the high school level. Accordingly, 227 Drury high school students in the college preparatory courses were asked, "Are you interested in training to be a scientist?" The responses indicated that 94.3 per cent of the freshmen general science students were interested in becoming scientists. Only 33.3 per cent of the senior chemistry students indicated a desire to become scientists. The evidence shows that the enthusiasm of the freshmen for becoming scientists levels off during the sophomore and junior years and drops again in the senior year. If we are to increase the number of students preparing to become scientists, we must not only nurture the yearly interest of our students in science study, but also, we ought to try to help disinterested but capable students to become interested in science fields.

Students who reported that they were interested in becoming scientists were

asked to name the field of science of most interest to them. Eighty-five students were interested in engineering, while 95 students were interested in all other science fields. The number interested in engineering declined between the freshman and junior years and remained steady between the junior and senior years. Thirteen seniors were interested in engineering as compared to only five seniors expressing interest in all other fields. Also, interest in engineering and science in general appears to decrease greatly from the freshman to the senior year. More than two thirds of those who remain interested in science named fields of engineering with chemistry and electrical engineering leading all others.

The students were asked to tell *why* they were *not* interested in science. The responses are recorded below:

	Total	Per Cent
More appeal in other occupations	34	23.8
More interest in other subjects	29	20.3
Likes and interested in science but not as a career	29	20.3
Difficult subject to understand	16	11.2
Science, is dull, boring, uninteresting	10	7.0
Dislikes science	7	4.9
Does better in other subjects	5	3.5
Not very good in mathematics	4	2.8
Lacks interest, could not do a good job	4	2.8
More for boys than girls	3	2.1
Lacks faith in science	2	1.3
	143	100%

Some of the students also reported interest in becoming teachers of science and the influences that caused them to want to teach. The primary influences were an interest in and a liking for science. Students believe that it would be interesting to teach a well-liked subject. The desire to help others and the opportunity to experiment, and the influence of good teachers were also strong influences. Other students reported the following: because teaching is a fine profession like school; always wanted to be a teacher; wants to teach nursing; because a relative teaches; an interesting and informative life; and has a desire to transmit science to the next generation. Interest in teaching science is high among the freshmen and sophomores — 44 students — but drops to only 12 students in the junior and senior years.

In response to the question, "What influenced you against teaching?" interest in other fields and no interest in teaching account for over half the responses. Wants to do research, low marks, not fitted for teaching, wants to practice science for work outdoors, and low pay are reasons given for not wanting to teach science.

If we are to expand science education, a great deal of consideration should be given to the students themselves so that they may be motivated to take up some phase of science as a career. The survey reported here is an example of what needs to be done on a much larger scale. Too often

(Concluded on page 102)

# SCIENCE FAIR      Product of School and Industry

**VIRGIL C. DOLLAHON**

Head, Exact Sciences and Pekin Science Fair Chairman  
Pekin Community High School, Pekin, Ill.

In these days when there is so much talk about juvenile delinquency, when school buildings the nation over are bulging with increased enrollments, when there is a constant cry for more engineers, doctors, and scientists, when the citizens of many communities are hesitant to impose additional school taxes upon themselves and their neighbors, the local science fair can be one of the ways the school can improve its public relations quotient.

Science fairs as presented by local and state academies of science are not new, but the idea of a science fair as a co-operative effort by the school and industry can be an excellent way of establishing a wholesome connection between the school and the community as was evidenced again this year when the Pekin Third Science Fair attracted more than 7000 parents, students, teachers, and school patrons.

"They came not to be entertained, but to see," observed Pekin high school superintendent, F. M. Peterson, as he saw the people pass among the more than 250 student projects in chemistry, biology, and physics and the 31 industrial and technical society booths that filled the boys' gymnasium and lined the walls of the leeway, a long, wide corridor that connects three buildings.

Planning for the fair began early in the fall. The date was set and placed on both the school and Association of Commerce calendars. Contact with the areas, indus-

tries, and professional and technical societies was made through the Association of Commerce education committee.

A joint publicity committee saw to it that the public was well informed through the press, radio, and TV. Invitations were sent to all of the schools, colleges, and universities of the area. Lists of students having members of their families connected with the area industries were sent to those industries. This proved a good public relations move. Not only did those industries publish the names of the students in their plant newspapers and magazines, but they sent plant representatives and photographers to report the fair for their plant and technical publications.

Finance was no problem. Mimeographing was done by the school. The board of education had tables and booths fabricated in the local school shops. The local newspaper furnished paper roll ends for covering the 116 tables. The science club sponsored an after-game dance for money to print certificates of award for the participating students. The local utility company strung cables with outlets for the booths and electrical projects and the city administration provided two full-time firemen and policemen as a safety measure.

Outcomes of the fair were significant. First, it represented community co-operation at its best. Too, for many adults, it was their first encounter with teen-agers in considerable numbers. The consensus of

opinion was that both groups profited from the experience.

The fair provided a splendid opportunity for many students to receive recognition for their skills and talents other than in sports and dramatics. In some cases, it boosted the student's morale; in others, it awakened a latent interest in science.

It gave the students a chance to learn about industry and how their science courses tie in with the industrial processes. It gave industry and the public an opportunity to learn of the training our youth are getting in science and of the extensive role science plays in our everyday lives. In a democracy like ours, it is particularly important that people understand the aims and achievements of our modern science courses, if they are to provide the proper schools to educate our scientists and engineers of tomorrow.



The science fair produces many desirable results: In Pekin, Ill., the fair: (1) established school-industry co-operation (below, right); (2) afforded students recognition for their talent and an opportunity to learn about industry (above); and (3) gave the community a way to learn about science teaching in the schools (below, left).





## The System-Wide Safety Council in Wellesley, Mass. —

surveyed the safety hazards existing in and around the schools . . . developed a safety education handbook as a curriculum guide for the classroom teacher . . . prepared a safety education information leaflet for parents: a successful effort because in Wellesley —

## Everyone Plays

Children aren't born with firm habits and persistent attitudes of safe living — they acquire these through careful, regular, and effective learning experiences provided by the home, the school, and co-operating agencies. It was the recognition of this fact that led the Wellesley, Mass., schools, under the capable leadership of Superintendent John B. Chaffee, to make the schools the focal point for safety education and to remove this area of education from the realm of the incidental to a position of top priority in the total curriculum.

Believing that the responsibility for providing leadership in such an important area must be distributed to key persons strategically located throughout the school system in order to be effective and far reaching, Mr. Chaffee's first step was to appoint a system-wide Safety Council composed of a representative from each elementary and secondary school, the assistant superintendent, the director of elementary education, the director of audio-visual aids, the director of art education, the instructor of the driver education program, director of health and physical education, a school nurse, and the safety officer of the Wellesley Police Department. (Wellesley is one of those towns fortunate in having a regular police officer, trained and assigned part-time to safety education activities, working in co-operation with the schools.)

### School-Wide Organization

It is interesting to note, that although the Wellesley Council is not the only one of its kind, it is among the comparatively few which are organized on a school system-wide basis with such complete representation from the professional staff. With a chairman and a secretary elected annually, the Council meets monthly and concerns itself with all matters pertaining to school, community, highway, and home safety. Although the Council is an adult group, it does draw into its meetings and involve students from time to time in discussions pertaining to student activities and have been greatly impressed with the fine contributions students are able to make in working toward the solution of some of their immediate problems.

Putting first things first, the Council undertook a survey of hazards existing in and around the schools and in the community and worked closely with the school systems' superintendent of buildings and grounds to eliminate hazards existing about the schools. These included the repair of swings and slides, the improvement of play areas, the covering of glass in play areas, and the like.

Snow removal procedures, priority lists for the construction of sidewalks in new building area developments, etc., were among the concerns of the Safety Council working to assist the town's

public works department. Another activity which received early consideration in the Council's agenda was the training and organization of students in each school into efficient student safety patrols. Following the standards suggested by National and State Safety Councils, the safety officer from the Wellesley Police Department systematically conducted a thorough recruitment, training, and organizational program which resulted in the establishment of the safety patrols in each school and the implementation of safety procedures and activities involving, in one way or another, the entire student body.

### Developing a Safety Curriculum

The next concern of the Safety Council was focused toward the curriculum and the work of the classroom teachers, for it was realized that systematic and effective teaching-learning situations are necessary for the development of increased knowledge and firm habits of safe living for all boys and girls. A strong recommendation to principals and teachers was made by the Council that the first five minutes of each day's opening exercises be devoted to a discussion of some appropriate phase of safety, such as, safest route to school, seasonal hazards, playground safety, the work of the safety patrol, bicycle safety, etc. This discussion period was to be in addition to the regular safety work in the curriculum.



Representatives from all school areas, working with the co-operative assistance of the police department, provide an effective Safety Council in Wellesley, Mass.



# *a Part in Safety Education*

ROGER M. WOODBURY

Assistant Superintendent, Wellesley, Mass., Schools

The curriculum and the instructional program were areas of concern to the Safety Council because of the lack of any uniform base or "minimum essentials" throughout the system to assist teachers in their program planning. It was true that each classroom had a supply of texts and reference materials, but much of this material was not particularly adapted to the local community or focused on local needs. Much of the safety teaching depended upon each teacher's own training or interest. Many teachers were providing a more adequate program than others.

The Council felt that some basic guide to assist teachers and to develop some uniformity of scope in meeting the needs of children in our community was desired and so a subcommittee composed of Council members and several faculty members at large who were able to make any added contributions, prepared a Safety Education Handbook for Wellesley Teachers. The Handbook outlines suggested teaching units for safety education on a seasonal basis and also provides a bibliography of supplementary references and audio-visual aids. In the classroom programs many opportunities are afforded for correlating safety with particularly, art, science, and music, as well as with many of the other subjects. Community resources and individuals with contributions to make to the safety instructional activities are fully utilized.

The Safety Council is currently engaged in preparing an information leaflet for parents to inform them of the schools' endeavors in order that they may lend their co-operative assistance in developing a united approach to their children's safety education. The Council has had the assistance of one of the school's parents who is chairman of the Safety Committee of the Central Parent-Teacher Association in the preparation of this leaflet. Frequent articles and pictures are prepared by Council members and published in the local newspaper, *The Townsman*, and in many of the school's publications for the purpose of giving recognition to those who are devoting so much of their time and energy to safety.



Two examples of areas of safety education fostered by the Safety Council in Wellesley: a bicycle driving test in which the ability of the school bicyclist must be demonstrated and in which good driving habits are taught; and a student safety poster contest in which winning posters visualize good safety habits for students.



# Discipline

## A Case for Administrative Support

JOHN W. BELL and  
ARTHUR S. GREEN

### Effective School Discipline —

Demands a clear-cut board policy . . . a three-fold set of administrative duties . . . a program of principal-teacher co-operation: this summary pins down who must do what to improve discipline.

While school boards and administrators are busily racking their brains for ideas in coping with overcrowded classrooms, revising their curricula, or getting enough good teachers, they all have one common problem: "Discipline!" Even the most progressive educators have come to realize that order is necessary for effective learning. Across the nation the schools have geared their atmosphere to meaningful experiences and activities, but we know that the freedom implied in this kind of philosophy of education still needs order. Because any kind of learning without order leads to chaos and disintegration.

#### When Discipline Is Good

Just what do we actually mean by *good* discipline? In the olden days many teachers as well as administrators and parents felt that a good classroom situation was based on fear, fear of physical punishment to be inflicted by a teacher or principal chosen for his splendid physique. Such discipline made fewer demands for understanding and training on the part of the teacher, but it was obedience out of fear and often a perversion of education resulted from its practice.

We owe thanks to educators like John Dewey who were to spare our children the boredom of school life. As a result of their philosophies of education, principals have been expecting an altogether different climate in today's schools; one which, the educational psychologists tell us, "nurtures good learning." While every school system or district is unique in having its own atmosphere, and principals rely on each classroom teacher to have his own pattern for contributing to it, there are a number of qualities

Dr. Bell is superintendent of district No. 2 in Chicago, while Mr. Green is a teacher in the district.

which best describe the ideal all educators are striving to achieve. These are:

1. A relaxed environment; yet "no leaning on the oars."
2. A democratic teacher-pupil relationship through mutual respect.
3. A balanced education program of active and semiactive participation.
4. A diversity of motivating activities such as reading, writing, listening, telling, viewing of films, discussion, exchange of ideas, and field trips.
5. Opportunities for children to be

creative and expressive both in thought and action.

Discipline under such conditions, however, still requires that teachers be fair, firm, consistent, and just in dealing with offenders.

#### Discipline: How Difficult to Maintain?

Yet, despite advances in theory and practice of discipline, many teachers seem to think that it is becoming increasingly difficult to maintain the right kind of discipline in their classrooms. Experienced and beginning teachers alike are daily throwing up their hands quite high in desperation with, "All day long I *keep* school, instead of *teach* school."

Still others put it, "I never knew that teaching implied being a professional nursemaid too."

Are they right? While no one either in or out of the profession of teaching has ever accurately measured how much learning nosedives when discipline is poor or how much of a teacher's school day is sidetracked in coping with the bewildering variety of picayunish problems, we do know that poor discipline results in a number of deleterious effects on both learning and children. Children who never learn to discipline themselves in school pay a dear price to learn it in adult life in society.

Another hazard: the majority of teachers quitting the profession for keeps each year give as their reason their inability to come to terms with incorrigible pupils. Fugitives from the classroom with their *Blackboard Jungle* tales make teacher recruitment more difficult.

What's more, teachers requesting transfers from district to district, school to school — even to another class in the same school — seldom give lack of knowledge of their subject matter as the reason. They are usually seeking an easier situation in terms of discipline.

To what degree a deterioration in the competence of our staffs is contributing to the problem nobody knows for sure. Some maintain that improvement in the amount and quality of pre-service training for teaching brings with it an automatic improvement in the teacher. Others maintain that the tight personnel market in all fields means a steady decline in the quality of the teacher until such time as supply begins to exceed demand in all fields — professions, armed services, new industries, expanding industries and services.

#### Administrative Help Needed

Can administrators rely on good teachers to handle their own discipline problems without any assistance? The answer is an emphatic no. Doubtless, good classroom management is allied with good teaching. But how about all

the acute overt delinquent problems like the ones which result in damage to school property or knifings. These are the kinds of problems which jeopardize even the best teachers and pupils. Their causes are too deep-seated — perhaps in lack of home discipline or authority, perhaps in the tensions of a changing neighborhood or family situation — to be solved adequately in the classroom. But alone they are enough to monopolize the major effort and time of a teacher's or principal's school day. Instances like these and *fear* of their occurrence, recurrence, and repercussions, are enough to drive any teacher's nerves to the breaking point. They hang like the Sword of Damocles over thousands of classrooms across the nation.

True, an effective program of good school discipline cannot be effective without strong teachers; teachers who not only know their subject matter, but are skilled in leading children to self-discipline. But we cannot expect them to play a lone hand in coming to grips with acute problems. Neither can we expect to give the problem a cavalier dismissal like simply firing teachers or expelling offenders.

A program for their adequate solution must stem from the creative and legal power and support of the school board itself and its administrative officers; namely, the superintendents and their assistants, including the building principals. And since the school does not exist on an island to itself but rather has an intimate connection with community life, an improvement in attitudes of pupils in school can result only from an improvement in our family life, our courts, our police, our commercial entertainment, and all agencies that have a direct impact on the thinking, emotions, and behavior of our youth.

#### A Clear-Cut Board Policy

Merely a few generalities in the board's rules about discipline and the duties of officers relative to discipline is not enough. This type of superficial dealing with the problem leaves administrators and teachers with little more than an educated guess to go on in both establishing a permeating atmosphere of good discipline and finding the solution to specific, acute behavior problems. The board might profitably formulate a clear-cut expression of policy to which all members of the teaching and administrative staff can turn for support in establishing the general tone of discipline as well as in dealing with specific crucial problems. While it should be arrived at democratically, incorporating the ideas of administrative, specialized, and teaching personnel as well as parents, and perhaps even specialized community agencies and institutions, the policy statement should be

specific enough to make the superintendent and his entire educational personnel feel secure. The aim should be to provide a Rock of Gibraltar to which everyone can turn with the feeling, "Here, here are all the answers!" These are some of the items which should be covered; others will be turned up by any board committee conducting a hearing on the subject of discipline and dedicated to finding some answers to the problem:

1. Legalized limitations of punishment
2. Legalized responsibilities and duties of administrators and teachers, with respect to treatment of pupils
3. Allocation of funds and authority for school services such as specialized personnel and institutions for coping with severe discipline problems and restoring them to the status of good citizens
4. Administrative procedures in dealing with acute behavior problems and setting the general tone of order in the schools
5. Evaluation of the prospective principal's past record in establishing relaxed, friendly yet effective relations with subordinates, equals and superiors
6. Rating of principals and other administrators on their leadership in creating an exemplary esprit de corps, a high state of morale and a sense of euphoria among their staff, their patrons, and their student bodies.

#### Administrative Duties

The duties of the superintendents and their assistants with respect to discipline should probably be threefold; namely,

1. Interpreting board policy to the general community and all members of the administrative and teaching staff
2. Fixing specific responsibility for the solution of acute behavior problems and following up for the purpose of seeing to it that the board policy functions
3. Giving authority and support to adequate study and treatment of crucial problems.

Briefly stated, such a program should be an active one. It would include informing the community at large about the heavy costs of meeting the needs of poorly disciplined children, recommending needed changes in policy to the board of education, stimulating principals to take a strong lead in establishing and maintaining a high order of discipline and school morale, and demonstrating courage and authority in the solution of acute behavior problems.

Building principals should be responsible for assuming leadership in a variety of discipline-related activities on both a preventive and corrective level. These include:

1. Furnishing parents, students, and teachers with information about the general tone of behavior that is expected in the schools and of the measures that are taken to maintain it

2. Briefing all teachers on the procedures to be taken in the treatment of acute discipline problems; the kind which cannot be adequately solved in the classroom

3. Supervising all classroom teachers and specialized school personnel and giving them the advice and support they need in dealing with the problem of discipline

4. Counseling the rare staff member who is having serious difficulty with classroom management, with a view to either making him a satisfactory disciplinarian or guiding him to a type of employment less fraught with danger to our youth and our society

5. Making the crucial decisions for the immediate treatment of severe behavior problems

6. Formulating a written policy which all staff members within the school can rely on for the principal's final support

7. Giving immediate and strong support to new, beginning, and substitute teachers.

#### Teachers' Responsibilities

While the solution of most discipline problems is still delegated to classroom teachers, the principal has a very important role to play as leader and coordinator of the efforts of his staff in maintaining a high order of discipline and pupil-teacher relations. Effective principals lead their teachers to pay attention to many factors in keeping discipline problems to a minimum. These include:

1. Routinizing elements of classroom activity that can be routinized
2. Doing everything that is possible to gain the co-operation of unadjusted children (This involves a thorough understanding of the latest and most valid findings with regard to child development and psychology.)
3. Notifying the school principal or other delegated school authority *before* an acute behavior problem arises, if it can be anticipated
4. Following through any disciplinary measures or corrective referrals made either by the principal, other school authorities, or the teacher himself
5. Developing skill and pride in handling discipline problems.

Such a program, involving the authority and support of all members of the educative staff of the school is certain to deal more effectively and realistically with school discipline than a program characterized by random haphazardness, with "the chips falling as they may." For it provides for utilizing the authority, creativity, and talents of all personnel concerned in a way which leaves very little room for the tragic consequences which can throw our schools into hysteria. What's more, it goes far toward giving to teachers and their students the fundamental security that is necessary to the world's most important work.

First-hand board experience in—

## How First Graders Learn to Read

DON BROWN

Eugene, Ore., Register-Guard



Tony Miglioretto (standing, right), member of the Lane County, Ore., School District 52, is shown here being instructed in how pupils in the schools learn to read by Harold V. McAbee, assistant superintendent. Other "pupil"-board members include (seated, left to right): Harry DeYoung; Wendell Wick, chairman; and Leonard Jensen. Thomas Powers is superintendent.

Tony Miglioretto's neighbor owns a pet skunk. This fact was the "icebreaker" in a pre-reading readiness lesson given to the Bethel school board at a recent meeting. Tony is a board member.

The lesson was given by Hal McAbee, assistant superintendent of schools. It was conducted as one of a series of discussions held at each board meeting by administrators to inform the school board about what is being done in the classrooms and why.

The neighbor's skunk came up for discussion in the same way as a first grader would mention it. "Teacher" McAbee introduced the lesson by an informal reference to pets. "How many of us have pets?" he asked his "pupils." Several board members raised their hands. To superintendent of schools Tom Powers, he asked, "What kind of pet do you have?" "A dog," Powers said. Other members mentioned their pets.

Finally, as teachers often do from their pupils, he drew the comment from Tony Miglioretto which he was searching for. "I have a neighbor who owns a skunk," Tony volunteered.

That did it. The answer was the one the teacher was "fishing" for, because the lesson he had planned to discuss with the school board dealt with skunks.

And so the lesson began, just as it would have begun in the first-grade classroom. By permitting the board members to participate at the beginning of the lesson, their interest was aroused. So it is with first graders.

"How fortunate," Teacher McAbee commented, reaching for a series of large colored skunk pictures. On some of the charts were individual skunks, obviously the mother, daddy, and little brother or sister. On other pictures there were more than one skunk. The teacher identified each one by a special name.

### Pictures Help

He pointed out that in addition to giv-

ing pre-reading readiness aid, the pictures help in numbers work. By counting the skunks, pupils are on their way to other skills. There are many kinds of picture stories, but the skunk series was discussed Tuesday night.

At the bottom of the pictures were large nonsense words, to show adults how baffling new words can be. In this case they were composed of strange symbols. To first graders, the teacher said, English words are equally as baffling as the nonsense words are to adults.

So it is necessary that some other meaning accompany the words. In the old days, teachers wrote single words on the blackboards and through repetition, they were pounded into the pupils' heads.

Teacher McAbee said the children of today enjoy learning under the newer method. They are taught to identify English words by association with pictures and through "experience charts." These charts list the words they are learning, giving them the chance to do repetitive work and to pick out appropriate words which they have used in picture charts.

By using charts and pictures the teacher is able to build up a reservoir of about 75 words which the child must recognize before he is ready to read at the primer level.

McAbee and superintendent Powers both emphasized, however, that the child must be prepared in many other ways before he reaches the "readiness" stage for reading.

McAbee said, "They have to be able to sit still and be able to concentrate for 10 or 12 minutes at a time. They have to be emotionally and physically ready and feel a personal desire to learn to read. This motivation is only one of the teacher's difficult tasks in the entire process of teaching children to read. They also must have auditory discrimination, being able to differentiate by ear between the word sounds."

Real life experience means a great deal in teaching and learning, too. McAbee used

this example: "The word, 'bank,' to a city child might mean a place to get money; but to the country pupil it possibly means a river or ditch bank." These differences must be reconciled.

He said it is necessary for the child to have a broad background of experience. "We can't easily discuss animals, for example, if the children have never seen or don't otherwise know about them," he said.

### Experiences Needed

"Once the child is ready to read, it's the experience he takes with him to the printed page which enables him to get meaning. At this stage it is necessary for the teacher, if the child has not already had the experience, to develop experiences in the child.

These experiences may be developed by field trips directed by the teacher or by various other methods. The children are taken to see dairies, animals, fire engines and policemen, and many other places and people. The more the child is interested personally in things, the more readily he will learn.

As the child reaches the reading stage, it is necessary to show him to read from left to right. McAbee said that at times children are found trying to read their words from right to left, never having learned about the other way.

A very important point, he said, is to teach them to develop a continuity of thought rather than reading single words in sentences as though they had no relation to preceding or following words.

In an extreme case a child is found who, after a couple of years of learning about reading suddenly tells the teacher, "Oh, it's just like the story you read to us," McAbee said. These children have never before realized the necessity for continuity of thought or had realized the basic reason for reading.

When children start reading, he added, "It's about as fascinating an experience as one can imagine for the teacher." Suddenly they find a new world in books.



## What You Should Know About School Tests—

A survey of major tests used in our schools today.

Dr. Noble discusses: **I. Q. Tests**—definition, significance, uses, some precautions, and their recent developments;

**Achievement tests**—definition and types, subject measured, uses, and evaluation. Dr. Weitz rounds up this fundamental data with the **three essentials** for establishing a school program for testing.

# Basic Data on I. Q. and Achievement Tests

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## I. I.Q. TESTS

That school board members and administrators need to be well informed regarding the nature and use of those tests which are commonly referred to as I.Q. tests is easily demonstrated. For example, consider the following facts:

1. Between 10,000,000 and 15,000,000 school age boys and girls (one school-age child in every three or four) will take an intelligence test this year.<sup>1</sup>

2. Approximately 30,000,000 of the 38,000,000 boys and girls now in school (kindergarten through high school), at one time or another have taken an intelligence test.

3. Of the persons in the United States who are five years of age and older, almost 50,000,000 have taken an intelligence test.

### 1. Definition

The so-called I.Q. tests are designed to measure intelligence. Intelligence has been variously defined, but in general it may be regarded as the capacity to learn, to respond adequately to original situations, or to readily adjust to new situations in the light of past experiences. Here it should be remembered that a *capacity* is an inborn potential rather than an acquired ability.

Intelligence tests are commonly referred to as I.Q. tests because the scores made on such tests are frequently interpreted in terms of intelligence quotients. The intelligence quotient, or I.Q., is really an *index of brightness* which is found by dividing the individual's mental age by his chronological age. The mental age (M.A.) of an individual is determined by inspection of the norms or standards which accompany each test. Thus, if John Doe makes a raw score of 56 on a given test and the norms show that the average eight year old scores 56 on the test, John Doe's mental age is said to be eight years. The chronological age (C.A.) of the individual is his birthday age or the number of years, months, and days which have elapsed since his birth. With the foregoing definitions as guides, the calculation of an I.Q. is easily accomplished. For example, if a child has a mental age of seven years and six months (7.5 years) and a chronological age of six years and six months (6.5 years), his I.Q. would be calculated as follows:

$$\text{I.Q.} = \frac{\text{M.A.}}{\text{C.A.}} \times 100 = \frac{7.5}{6.5} \times 100 = 115$$

Notice that in the above equation the ratio (M.A. ÷ C.A.) is multiplied by 100, this being done largely to avoid

the use of decimals. Notice also that, according to this equation, the average individual would have an I.Q. of 100.

### 2. Significance of the I.Q.

The frequent use of the I.Q. by the schools is due primarily to two facts. First, it provides a basis for comparing each pupil tested with the average pupil of the same chronological age, thereby indicating the extent of his mental retardation or superiority. Second, because the I.Q. remains sufficiently constant for all practical purposes, it is a highly useful device for purposes of educational and vocational guidance. On the average, if testing of infants and very young children is excluded and if the tests are properly administered, re-testing yields a negligible difference of only five points (plus or minus) in the magnitude of one's I.Q.

The classification level of individuals, based on the magnitudes of their I.Q.'s is shown below:

I.Q. Classification	
130 and above	Very superior
120-129	Superior
110-119	Bright normal
90-109	Average
80-89	Dull
70-79	Borderline
50-69	Moron
25-49	Imbecile
0-24	Idiot
	} Feeble-minded

### 3. Uses of I.Q. Tests

There are two major types of intelligence tests, namely: (a) individual

<sup>1</sup>All statistical data appearing in these articles are estimates, supplied at the author's request by Dr. Roger T. Lennon, Director, The Division of Test Research and Service, World Book Company, Yonkers-On-Hudson, New York.

tests; and, (b) group tests. The administration of an individual test, such as the Stanford Revision of the Binet-Simon test, is time consuming and requires the services of a qualified psychologist. Group tests, because they permit the examination of a relatively large number of pupils during a single testing period and because they may be administered by the classroom teacher, are the type of tests generally used in the public schools—individual tests being frequently employed as supplementary tools for the study of special cases.

To date, the public schools have employed intelligence tests: (a) to measure the individual pupil's capacity to learn; (b) to identify atypical children—both feeble-minded and gifted children; (c) to determine the extent of the association of delinquency and mental deficiency; (d) as a basis for the grade placement of pupils; (e) as a basis for separating a school grade into bright, average, and dull sections; (f) to predict the occupational level for which a pupil may be trained; (g) to predict the final mental age (i.e., age at maturity) and final school grade which the child is likely to attain; and (h) to study the effects of individual differences—i.e., ancestry, race, sex, age, and environment upon intelligence. In addition, intelligence test results, when employed along with the results of academic achievement tests, have served to indicate the extent to which the teacher is succeeding in getting the pupil to make full use of his capacities to learn. In the last instance, a pupil's academic achievement (i.e., educational age) as determined by the achievement test is divided by the pupil's capacity to learn (i.e., mental age).

#### 4. Precautions

For more than a quarter of a century intelligence tests have proved to be valuable aids to the school authorities in gaining a better understanding of the pupil's capacity to learn. For this reason, school board members should make an adequate supply of I.Q. tests available to the schools under their jurisdiction. When such tests are employed, however, certain precautions should be observed regarding the use of the test results.

In the first place, the school board member should regard intelligence test results as being purely professional information. Inquiries by a parent concerning his child's mental age or intelligence quotient should be referred to the superintendent of schools. Only in highly exceptional cases should a child's mental age or intelligence quotient be divulged by the superintendent. The child who learns that he has an ex-

ceptionally high I.Q. may become vain; the child, who learns that his I.Q. is average, may make unnecessary modifications in his ambitions; and the child with an exceptionally low I.Q. may become unduly depressed. In brief, the results of I.Q. tests are best used when the school faculty employs them for the improvement of instruction and pupil guidance. Parents and pupils simply do not possess the professional background which leads to the constructive interpretation and use of test results. Gossip by parents and pupils, based upon unprofessional interpretations of test results, therefore, may serve to hamper the development of the school's instructional program.

In the second place, school board members should remember that the major purpose of I.Q. tests is to measure the pupil's capacity to learn—nothing more. Indeed, intelligence tests are not designed to measure such things as academic achievement, effort, interest, and ambition.

#### 5. Recent Developments

Originally intelligence tests were designed to measure the amount of intelligence which the individual possessed or, in the words of Alfred Binet, "the sum total of those thought processes which consist in mental adaptation."<sup>2</sup> During the past 30 years, various authorities—notably Spearman, Thurstone, and Guilford—using factor analysis have attempted to identify the

<sup>2</sup>Terman, Lewis M., *The Measurement of Intelligence* (New York: Houghton Mifflin Company, 1922), pp. 40-44.

elements or components of which intelligence consists. Although complete agreement has not been achieved and numerous studies are underway, certain significant conclusions have emerged. There is sufficient evidence to indicate that intelligence like any other entity consists of a number of components and individuals differ in terms of the amounts of each of these components they possess. In addition, there is evidence that the components of intelligence do not develop according to identical rates or patterns. Studies indicate, for example, that at 22 years, man reaches his peak in rate and speed of learning; between 22 and 40, there is a slow decline which becomes accelerated after 40; and by 80 the decline in these functions has experienced a retrogression to the point which equals the average child of 12. Other components adhere to different patterns of growth. For examples: accuracy increases with age, lasting until advanced old age; and analytical judgment shows no decline before 55 and remains strong—if somewhat diminished—into the eighties and even beyond. Apparently, therefore, the relatively early loss in rate and speed is largely offset by delay in the ages at which marked decreases in other functions occur. Eventually, therefore, factor analysis may enable the psychologists to achieve complete agreement regarding all of the components of intelligence and to construct tests designed to measure the amount of each component possessed by the individual, regardless of the individual's age level.

## II. STANDARDIZED ACHIEVEMENT TESTS

During the school year 1956-57, approximately 27,500,000 elementary and high school pupils in the United States took one or more standardized achievement tests—72.4 per cent of the 38,000,000 elementary and high school pupils.

During the school year 1956-57, between 45,000,000 and 50,000,000 standardized achievement tests were administered—roughly 1.3 tests per pupil enrolled in elementary and secondary schools in the United States.

#### 1. Definition and Types

A standardized achievement test is designed to measure a pupil's achievement in one or more school subjects. Such measurement is accomplished by

carefully constructed tests for which standards or norms have been developed—these norms usually being representative of achievement for the generality of the school population and expressed in scores which indicate the average pupil's achievement by school grade levels. In addition to tests which measure the status of a pupil's achievement, there are: (a) *diagnostic tests* which measure the relative strengths and weaknesses of the pupil in various phases of a subject; (b) *prognostic tests* which predict future accomplishment; and (c) *practice tests* which provide standardized drill in the fundamentals of school subjects. In general, the aims of the various types of tests are to determine levels of pupil achievement in

the various subjects and the improvement of instruction.

Achievement tests may also be classified according to their scope or the number of subject matter fields they cover. A test which measures pupil achievement in a number of subjects is referred to as a *comprehensive achievement* test; a test which measures pupil achievement in only one subject is called a *single subject test*.

## 2. Subjects Measured

During 1956-57, many pupils who took comprehensive achievement tests also took single subject tests and many pupils who did not take a comprehensive test were given one or more single subject tests.

In the elementary schools, reading is the area in which testing occurs most frequently. Arithmetic most probably ranks second, with English, spelling, and the social studies estimated to follow in the order named. According to Dr. Roger T. Lennen:

Classification at the secondary (school) level is a little more difficult, but we would estimate again that reading is the most popular, followed by English, by the various branches of mathematics, and, finally, by social studies and the study skills. Testing of foreign languages and of the sciences is, we believe, less common than in the areas mentioned above, though by no means negligible in volume.<sup>3</sup>

## 3. Uses of Tests

Standardized achievement tests serve both as aids in school administration and as aids to the individual pupil. They aid the school administrator by serving as instruments for: (a) comparing pupils' achievements with national norms; (b) analyzing the instructional program; (c) determining the types of special classes that are needed for atypical children and identifying those children who should be assigned to each type of class; (d) supplying objective data for cumulative reports regarding each pupil's achievement; (e) assigning pupils to the proper school grade and making objective decisions on pupil promotions; (f) conducting necessary research in connection with the instructional program; and, (g) serving as bases for interpreting the results of the instructional program to the public. They aid the pupil by: (a) determining the status of his achievements; (b) diagnosing his strengths and weaknesses in the various school subjects; (c) serving as remedial instruments—for examples suggesting needed drill and practice exercises; and, (d) serving as bases for motivation and guidance.

Incidentally, it should be pointed out that standardized achievement test results are widely employed and interpreted along with the results of stand-

ardized group intelligence tests. Such usage permits the teacher to compare the pupil's actual achievement with the pupil's capacity to learn. However, achievement tests are used more frequently than intelligence tests. Thus, during the school year 1956-57, between 10,000,000 and 15,000,000 intelligence tests were given in the elementary and high schools as compared with between 45,000,000 and 50,000,000 achievement tests (being due, among other things, to the prevailing concept regarding the constancy of the intelligence quotient).

## 4. The Evaluation Program

Modern instructional procedures emphasize the necessity of a carefully planned program which assures the systematic evaluation of pupils' achievements. The program for the evaluation of pupils' achievements is developed in writing before the beginning of the school year, and is so constructed as to permit sufficient flexibility for modifications which may prove necessary because of unexpected needs. In "blue printing" this program, goals in terms of desirable achievements are first listed and weighed; then, the weighed goals are related to course context in a manner which utilizes classroom experiences as bases for attaining pupil behaviors indicative of goal fulfillment.<sup>4</sup> For determining the extent to which such be-

haviors are attained, measuring instruments or test are employed.

Systematic evaluation requires the selection of appropriate tests for measuring the various pupil behaviors which are regarded as desirable outcomes of the instructional program. For the measurement of certain types of behaviors, the use of teacher constructed tests—either essay or short answer tests, such as true-false, completion, and multiple choice tests—are practical. For the measurement of other types of behaviors and for the purposes listed in section II of this article, the purchase of standardized achievement tests is necessary. In brief, a comprehensive program of systematic evaluation requires the use of both teacher constructed tests and standardized achievement tests.

## 5. Conclusion

School board members should encourage the administrators and teachers in their respective school systems to follow the practice of developing systematic programs for the evaluation of pupil achievement. In addition to recognizing the importance of teacher constructed tests, school board members should provide the faculties of their school systems with such standardized tests—both group intelligence tests and group tests for measuring pupils' achievements—as are necessary for evaluating the results of their instructional program and supplying data for the efficient instruction of the individual pupil.

<sup>4</sup>For an excellent discussion of "blue printing" see: Travers, Robert M. W., *How to Make Achievement Tests* (New York: The Odyssey Press, 1950), 180 pp.

# Minimum Essentials for a Testing Program

HENRY WEITZ

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Scarcely a month goes by in which the writer does not receive an inquiry from a school administrator or teacher requesting information about how to organize a testing program for his school, or department, or class. These inquiries generally include the information that the writer has been appointed chairman of the testing committee and

has been assigned the task of planning a city-wide testing program. After the suitable preliminaries indicating how much the writer would appreciate some help, the letter generally goes on to ask for recommendations relating to the most appropriate tests to use and the methods of administering and scoring them. There is only an occasional ref-

<sup>3</sup>Letter to author, April 29, 1957.



erence to methods of interpreting the results.

Many of these letters are quite unrealistic. A letter written by an experienced high school principal is fairly typical of the more reasonable, but not very realistic, inquiries. He wrote in part:

Since I have been asked to submit a system-wide standardized testing program for the City Schools, I am interested in obtaining your recommendations regarding a minimum adequate program for grades one through twelve.

At the same time I should like your reaction to such questions as: What are the relative merits of teacher scoring and interpretation and machine scoring and interpretation by specialists? Should the classroom teacher administer the tests or should all tests be administered by the same person (for example, the supervisor) in order to assure uniformity of results?

Letters of this sort suggest that the writers have only limited contact with the realities of the testing situation. They appear to assume that the determination of the grade placement of certain types of tests, the selection of the specific tests to be administered, and the programming of the administrative and scoring procedures constitutes a testing program. Nothing could be further from reality.

### Three Essential Elements

The establishment of a testing program in a school system depends upon three essential elements.

1. The determination of the purposes of testing;
2. The training of the faculty;
3. The orientation of the community.

If these conditions exist, appropriate tests can be selected, administrative procedures can be established, and the results of the testing can be applied to facilitate the achievement of the instructional and guidance goals of the educational program. Failure to establish any of these elements will impair the educational utility of measurement and will raise serious questions regarding the justification of the whole project.

#### 1. Purposes

The first essential in establishing a testing program is to determine its purposes. School testing programs may be established to achieve a variety of purposes, many of which are legitimate functions of the instructional and guidance services of the school. For example, testing programs may be used to select and classify students in terms of their abilities to profit from available educational experiences, or to evaluate the academic achievement of students, or evaluate the teaching effectiveness of teachers, or to determine whether or not the available curricula are meeting

the interests of the students, or to serve as a basis for educational and vocational guidance, or to estimate the incidence of emotional disturbance in the student population. Any of these purposes, as well as others which come readily to mind, or any combination of these purposes might be a legitimate reason for developing a testing program.

These purposes of a testing program are, of course, derived from the general purposes and philosophy of a school or system. An outsider attempting to outline a testing program for a school or system he is unfamiliar with must assume that the philosophy of the school is clearly enough defined to permit the derivation of a set of testing purposes and that it is known both to the staff and to himself. Any outsider who attempts to write a prescription for a testing program based upon these assumptions knows less about testing and schools than he should.

How then may the purposes of the testing program be determined? The stacks of graded answer sheets gathering dust in principals' closets across the country and the unread test score entries on cumulative records are mute but poignant testimony to the fact that the purposes for a testing program *cannot* be determined by administrative fiat. Testing programs derived from purposes imposed by the administration upon an unprepared, disinterested, or resistant faculty have little chance of achieving any meaningful or useful educational ends.

The purposes of a testing program must be determined by the instructional and guidance staff members who are going to use the program. Committees of the faculty will need to be established to review the general educational philosophy of the school in order to determine whether or not the attainment of the goals of education established in that philosophy can in any way be facilitated by a testing program. (If the testing program produces no other results than such a review of the philosophy by the entire staff, it may have made its greatest contributions to the educational services of the school.)

This review of the philosophy of the school and the derivation of testing purposes from that philosophy can occasionally be made more effective by securing the services of a measurement or curriculum specialist (with training in measurement) who can, from time to time, guide the staff in methodology of translating educational philosophy into measurement purposes. Care must be exercised, however, to insure that the specialist whether he is an outside "expert" or a member of the administrative staff, does not impose his own narrow views upon the staff. The purposes of

the testing program as they emerge from this staff study must reflect the needs felt by each staff member for procedures and data which will enhance the instructional or guidance functions he is attempting to perform.

#### 2. Training

The second essential in establishing a testing program is to train the staff in administration and use of measurement in education. There is little profit in carrying on measurement projects yielding volumes of data which the staff is either unprepared or poorly prepared to use. Many school testing programs have been established in terms of some fairly clearly defined purposes, but have failed to achieve those purposes because the staff was ill equipped to apply the results of testing.

An occasional discussion at a faculty meeting by the principal, guidance director, educational supervisor, or outside measurement expert will do little to improve the effectiveness of teachers in using testing instruments in education, nor will occasional faculty discussion groups and panels in which little is exchanged except prejudices and ignorance. Most teachers developed a nodding acquaintance with measurement in some aspect of their undergraduate teacher training program. A few may have encountered the subject briefly in their subsequent training. These few, inadequately mastered ideas will not be enough to make a testing program operate effectively no matter how often or how rapidly they are exchanged in committee discussion groups. The pooling of ignorance is no substitute for training.

The way to develop a faculty well trained in any educational skill, including skill in measurement, is to provide time and adequate instruction for inservice training. This may be done in at least two ways. One method is to allow interested staff members time to participate in regular instruction in measurement offered in the school by a measurement specialist whose services are paid for by the school system; another method, followed by some systems, is to allow interested teachers time to attend classes in measurement at a nearby university. In either case these teachers are then available to assist the rest of the staff in developing a minimum level of competence in measurement. Committee meeting devoted to measurement can now have some substance contributed by these trained people.

#### 3. Community Acceptance

The third essential in establishing a testing program is to insure that the community understands and accepts the



purposes of the program. This understanding and acceptance should extend to both parents and students. Lay people are understandably resistant to anything which smacks of mechanical regimentation, and nothing smacks more of this than some testing programs. If parents and students understand and accept the purposes of a testing program, they are better prepared to co-operate with it. And this co-operation is essential if the results of the testing program are to be applied to the educational services in ways which will influence the experiences of the students. (After all, the only reason for having a testing program is to influence the educational experiences of the pupils.)

Orientation of parents to the purposes of the testing program can be achieved, in part, through parent-teacher meetings in which the program and its purposes are described, through informative letters to parents, and the like. The most effective orientation, however, will be achieved by well-informed teachers explaining the purposes first to the students and subsequently to as many individual parents as can be induced to come to the classroom, under one pretext or another, to listen.

Now having determined the purposes, trained the teachers, and enlisted the co-operation of the community, it is possible to establish a tentative outline of the testing program. Tests which contribute to the achievement of the purposes can now be selected fairly readily from among the many tests available. Methods of administering and scoring the tests, and procedures for reporting the results can now be determined by the availability of trained staff. Applications of the results can now be introduced with some reasonable expectation of acceptance by a trained staff who can interpret what is being done to an informed and receptive public. In this way, the testing program can have some assurance of having a meaningful impact upon the instructional and guidance services of the school.

#### Time Consuming and Expensive

To be sure, the establishment of these minimum essentials is a time consuming and possibly expensive process. But testing itself is expensive both in time and money. It is worth the cost only if it contributes to the educational services. The full contribution of testing can be achieved only by enlisting the informed support of the staff and community. Thus the money and time spent in establishing the essential conditions discussed here make it profitable to undertake the expenses of tests, their administration, their scoring, and their reporting.



In Marion's summer kindergarten, pre-schoolers learned to express their creative ideas.



## A Summer Kindergarten Reviewed

ROBERT S. BROWN

Superintendent of Schools, Marion, Ohio

### The Marion, Ohio, Summer Kindergarten Program—

- (1) Encouraged the child to make the initial break from home . . . (2) accomplished primary group adjustment . . .
- (3) began preliminary reading readiness . . . (4) Obtained clinical data . . .
- (5) Facilitated a widely-attended "Safety Town" program.

During the past decade much progress has been made in the educational program in the Marion city schools. New buildings have been built, additions have been added, buildings have been modernized by the addition of new furniture, lighting, and heating plants, and special services and curriculum offerings have been greatly improved.

With the rising enrollments causing a shortage of classrooms, the board of education has been unable to add a nine-month kindergarten to the school program. This is recognized as an educational need of our boys and girls by the board, parents, and staff.

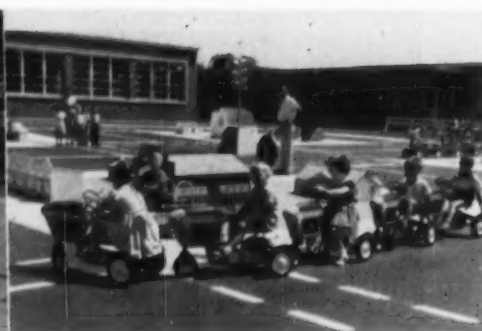
It is estimated that it would cost approximately \$300,000 to build, equip, and staff a nine-month kindergarten. Other impending needs of the schools, such as the replacement of old buildings, have made it seem unwise to sub-

mit a bond issue to the voters for this purpose.

#### How the Program Operated

In an effort to meet the need for a kindergarten type of program, the board this year authorized an experimental eight-week summer pre-school adjustment program for Marion's boys and girls. Each elementary building had at least one class. The preschool adjustment program was scheduled for eight weeks beginning June 24. Classes met from 8:45 to 11:30 Monday through Friday.

Teachers from the primary grades volunteered to teach the classes. As there were more volunteers than classes a selection was made. Every effort was made to place teachers in buildings where they were assigned during the regular school year.



As part of the pre-school adjustment experience, the kindergarteners learned to play together, as well as to learn good safety habits in a two-week "Safety Town" program co-sponsored by the Marion Rotary club and the board of education.

To be eligible for summer kindergarten a child must be six years of age prior to October 1, 1957, and must live in the Marion city school district. This corresponds to the age requirement adopted by the board of education for entrance to the first grade in September.

Enrollment was voluntary. Parents were urged, however, to register their child, if at all possible. Approximately 75 per cent of those eligible for attendance enrolled. The final enrollment figure reached 514 boys and girls who were housed in 22 classrooms throughout the city. Each child was enrolled in the elementary school which serves his district.

There was no tuition. A small charge was made for personal supplies. Transportation to school, if necessary, was provided by parents. Parents also assumed full responsibility for the safety of their child to and from school. There was no school patrol on duty during the summer.

Punctuality and regularity in attendance was encouraged and parents were requested to send notes explaining reasons for absence. Children were asked to arrive no earlier than 8:35. If a child was to go home alone the school was notified in writing by the parents.

#### Purposes of the Program

The general purposes of this program were: (1) to encourage the child to make the initial break from home; (2) to accomplish initial group adjustment; (3) to begin preliminary reading readiness; (4) to obtain various clinical data; and (5) to co-ordinate a "Safety Town" with the kindergarten plan.

The kindergarten program was planned to meet these pre-school needs of the boys and girls through such activities as: language activities, music,

free play, conversation, dramatization, social activities, working with materials, building with blocks, health and safety, rhythms and games, art activities, stories, science activities, planning, short field trips, and looking at books.

Reading and writing were not taught as such, but skills, habits, and experiences needed for reading were developed and children learned to recognize and perhaps to print their names. Numbers were not taught in kindergarten, but children learned to count objects with which they have daily contact.

In summary, Marion's kindergarten children:

1. Learned to work, play, and share with each other.
2. Enjoyed music through singing and participating in rhythms.
3. Expressed their own creative ideas in clay, paint, paper, blocks, and other materials.
4. Increased their ability to express themselves orally by telling stories, sharing experiences, and participating in dramatic play.
5. Gained confidence in their ability to rely upon themselves and recognized that their formal schooling had started.
6. Developed muscular skills through taking part in games, playing with large building blocks, outdoor and indoor play.
7. Developed self-control by learning to take turns and through listening and talking.
8. Grew in responsibility by learning the proper care for equipment, toys, books, and personal property.
9. Prepared for reading experiences through acquiring useful vocabulary and associating words with objects; developed the desire to read through listening to stories and poems.

A report of the progress each child made in these areas was sent to parents twice during the eight-week period —

once at the end of the fourth week, and at the close of the summer session.

#### Safety Town

The Marion Rotary Club was interested last spring in establishing a Safety Town for the preschool children of Marion as a club project. This program had been established this year and was operated as a joint project of the club and the Marion board of education.

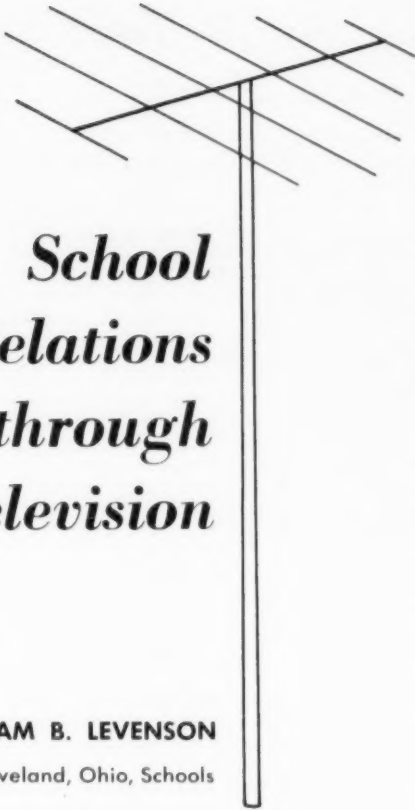
In conjunction with the summer kindergarten, each child was given a two-week Safety Town program designed to give him firsthand experience in learning safe playing habits, safe walking and riding practices, and other information on traffic safety. A miniature, four-block Safety Town had been constructed on a black-topped area adjacent to the high school. This course was complete with child-size cars, streets, buildings, and traffic devices. Trained adults conducted the program.

During the period the child attended Safety Town he received classroom instruction in safety.

#### In Summary

Our summer kindergarten program has been attempted on a trial basis. It is recognized that there are many limitations, yet it has given an opportunity for year-round use of existing facilities and has provided a needed expansion of our school program by giving some pre-school adjustment experiences prior to entering the first grade at a cost of about \$22 per pupil for the eight-week period. Much was accomplished during the first year of operation.

A continuous program of evaluation as we follow these students in the first grade will enable us to give an exact measure of the summer kindergarten's educational value to our boys and girls.



# School Public Relations through Radio and Television

WILLIAM B. LEVENSON

Deputy Superintendent, Cleveland, Ohio, Schools

Each of us has his own concept of public relations. A wag once defined it as the art of not treating the public as you do your own relations. I prefer this definition, "Public relations is good performance, properly appreciated, because it is adequately communicated." Notice what comes first—good performance. I doubt very much if the best public relations procedures will in the long run make for continued acceptance or support of a poor product or poor service. Public relations is not a slick way of getting approval of mediocrity.

Unfortunately, too many school people think of public relations in a negative sense—as a defensive technique—as a contrived answer to criticism. If our voice is heard only in protest, only after complaint, then recalling Hamlet many will observe, "The lady doth protest too much. . . ."

## The Schools Are Public

Before discussing radio and television, permit me to make a few more general comments because they condition the school use of the mass media. As one works in a school or school system for some length of time, he perhaps naturally develops proprietary ideas—almost a sense of ownership. Loyalty is one thing but the notion that what goes on in the school is no one else's business is, of course, foolish.

First the schools are public. They belong

to the people, and the people have a perfect right, in fact an obligation, to criticize constructively. Let us not be too thin skinned about it.

No social institution meets with universal approval, surely not our government, not even our churches. Is it not silly to get panicky every time a magazine article or a newspaper item criticizing the schools makes its appearance? If the shoe fits, we have a job to do; if it doesn't, we have little to worry about.

The greater tragedy would be to have no one talk about the schools, where apathy and indifference reign and where all orders come from some distant Politburo which no one dares question. We cannot have traditional American grass-root development of public schools without some disagreement.

In communicating with the public, I would suggest we keep in mind two principles: (1) never underestimate the public's intelligence; (2) never overestimate the public's information. Too often we confuse ignorance with lack of intelligence.

## Radio and Television: New Horizons in School Public Relations

The ideal program of interpreting the schools to the public should involve the effective use of these mass media.

Dr. Levenson discusses their advantages to school use in terms of **audience** and **programming**, and submits a summary of **lessons**, to remember when planning your programs.

There is nothing mysterious or esoteric about public relations. One does not need a Madison Avenue address or a gray flannel suit to be adept at it. In fact, the best practitioners of public relations operate at the personal level—they simply like people and have the knack of making evident their desire to be of service. Note please that we are not talking about mere publicity or propaganda. Public relations is much more than that. It includes the sum total of all your personal relations. The teacher who does his job well is at the same time achieving the finest kind of public relations.

The catch is that in a complex, busy society, the perimeter of our personal contacts becomes more and more limited. Most people in your community probably do not know you or your institution—they know *about* you and *about* your school system. Most of this information is spread by word of mouth: comments of pupils, the reactions of parents, utterances by the school staff, some reports come from direct observations at school functions, and a good deal by newspaper accounts. However, most of this is subjective, certainly haphazard and sporadic.

Few would doubt that part of an effective public relations program at least in a large urban community involves a systematic use of the mass media. Let us grant that television and radio suffer from one weakness—they are not two-way in their nature—there is no actual exchange of meanings, but that is far outweighed by the power and persuasiveness of these media.

## Television and School PR

The appeal of television is well known. More Americans spend more time viewing television than they do on any other activity, excluding sleeping and working. In addition, countless hours are spent during the day listening to radio. Realistic businessmen invest huge sums sponsoring programs from early in the morning until after midnight. Politicians use the media at great expense to persuade voters. Both of these media, radio and television, are unique in that they are intimate and persuasive. The keynote in their use is intimacy. From the fireside chats of F.D.R. to the subtle selling of Arthur Godfrey, planned informality has been the highway to power and profits.

The schools have several advantages in the use of these media. In terms of audience:

First, the procedures discussed are familiar to many citizens, for they attended the schools.

Second, the public has a large investment in the schools, and it may be true that where a man's dollars are his heart is.

Third, parents have a vital concern in their children and the institution in which they spend a large part of the day.

The schools have advantages in terms of programming:

First, in many instances it is possible for a school system to secure free time with which to broadcast. It is more difficult to secure such time on television than it is on radio, and it is always difficult to get the best time in terms of listener appeal.

Second, leading citizens will frequently contribute their services to take part in school programs.

The following is a brief summary of some of the lessons we have learned as a result of planning and presenting more than 500 television programs over local Cleveland stations. We are still learning with each new program. Perhaps this list will be helpful to those planning to use television for school purposes.

1. Ideas for programs are plentiful; what counts much more is the manner in which they are executed. Talent, not necessarily brains, is needed. There is a distinction in a creative field. The keenest scholars are often television failures.

2. The personality selected for the program is far more important than the subject chosen.

3. Use the little picture to show the big idea. Do it through a person, keeping always in mind that people want to know about people.

4. Whenever possible, *show* it, do not talk about it.

5. Simplify. It is far better to explain one important idea in various compelling ways than many ideas in dull fashion.

6. Tell what, show what, but emphasize *why*. For example: *Why* is phonics only part of the reading program? *Why* is oral spelling not stressed as it once was? *Why* have handwriting teaching methods changed?

7. Use your community experts to provide audience attraction. For instance: in a hobby series use the champions in the district, in a health series use specialists suggested by the Medical Society.

8. Avoid pedageese. People are disposed to believe a message only if it is presented in terms of their own experience. Telling is not necessarily communicating.

9. Beware of audience loss by contrast in program standards. Amateurish dramatics is fatal. Do what Hollywood cannot do. Localize in terms of familiar people and familiar issues.

10. Remember that good will and understanding are often a by-product. Example: a visual demonstration of Science Fair entries is more effective than a harangue insisting that science is still taught in the schools.

11. Publicize your program in advance. There is always a gap between the audience you have and the one you could have had.

## Know Your Schools—By TV

DONALD G. TARBET

Associate Professor of Education and Television Program Co-ordinator  
University of North Carolina, Chapel Hill

While quite a number of schools have used television as a means of interpreting their public relations programs to the public, this article describes the series of programs called **KNOW YOUR SCHOOLS** which is telecast over WUNC-TV, the educational television station of the Consolidated University of North Carolina.

From the time WUNC-TV came on the air in January, 1955, the school of education of the University of North Carolina has had a part in the station's programs. The first series was a "junior-grade Omnibus" called **THE YOUNGER SET**, designed for viewing after school hours and for an audience of junior high school age boys and girls.

The television committee of the school of education met in the fall of 1955 and plans were made for continuing the in-school programs. It was decided to present a series of public relations programs called **KNOW YOUR SCHOOLS**. The series would be the forum type at which various problems facing our schools would be discussed by staff members and parents. A schedule was worked out and the programs were begun in the spring of 1956.

Various amounts of visual materials and equipment were used to illustrate various phases of the discussion. The dean of the School of Education and other staff members served as moderators of the panels, which in turn were composed of from three to five staff members. Sometimes parents or other guests served on the panels. The studio audiences were composed of representatives from Parent-Teacher Associations of schools in the viewing area. Actually these were active studio audiences in that provisions were made by which a member could stand and ask a question of the panel and thereby take part in the lively discussion.

Varied key topics and controversial issues were used. Programs dealt with the following as illustrations:

"How Are Our Schools Supported?"; "Ways in Which Children Differ"; "Can Johnny Read?"; "Characteristics of a Good School

Building"; "What Is a Good Testing Program?"; "Teachers for Our Children"; "Responsibility of the School for Recreation"; "Science in Our Schools"; "Reading in Our Schools"; "Behavior and Misbehavior"; "Camping as an Educational Experience"; "Health of the School Child"; "My Child Goes to School Next Year."

While many of these discussions went off on a tangent, it was thought that such spontaneous discussion made the discussions even more interesting. The visiting group who served as the studio audience spoke highly of the program as a means of interpreting the schools to the public. And interestingly enough, many people wrote in or stopped panel members on the street and commented on something which was said. It is difficult to determine an exact viewing audience, but one principal insisted that 3000 people were watching from his area alone the night his group was the studio audience. It was estimated that the station had a viewing audience on such programs of around 50,000.

These programs were presented from 8:00 until 8:30 in the evenings. At first this was a weekly series but due to programming conflicts it was later scheduled for every other week. One year the programs were presented on Thursday nights and the following year on Friday nights. The change was not made because of a preference for Friday night but rather to facilitate a series of credit courses offered on Tuesday and Thursday nights.

The **KNOW YOUR SCHOOLS** series has many possibilities for service to the community. It may be possible to include more demonstrations and illustrations of school activities in the future. This might prove more effective than the forum type of discussion between specialists in various phases of education and parents. The use of the mobile unit may be used to take viewers to the schools. These guided tours could prove very helpful in showing characteristics of good schools. Various phases of the curriculum may be demonstrated and discussed. The possibilities are many and varied.



North Carolina education professors discuss good school facilities in WUNC-TV's series, "Know Your Schools."



To facilitate expenditures for instructional supplies, textbooks, and library items, try—

## *A Building and Departmental Budget System*

**FRANK D. AVERY**

Business Manager, Richland, Wash., Schools

For several years the Richland, Wash., school district has used a system of building and department budgets, within the over-all general fund budget, to facilitate and control expenditures within certain areas. The purpose of this system is to transfer to the building principal, or in the case of certain functional departments, to the department supervisor, the determination of his particular needs in the areas of instructional supplies, textbooks, and library and reference expenses.

Budget allocations are made to each building, at a specified per-pupil rate multiplied by the average enrollment of the building. In addition, certain special-purpose allocations are made for carrying on special activities. While we have adjusted the per-pupil allotment up or down as our general budgetary conditions permitted, we used the following rates for general allocations for the 1956-57 school year:

Class 25, Instructional Supplies (as defined in the State Accounting Guide)

\$2.30 per pupil, kindergarten through 6th grade

\$2.50 per pupil, junior high grades

\$3.25 per pupil, senior high grades

Class 27, Textbooks (new books, replacements, repair and rebinding, new adoptions)

\$2.00 per pupil, kindergarten through 6th grade

\$2.50 per pupil, junior high grades

\$3.00 per pupil, senior high grades

Class 28, Library and Reference Expense (includes new library books, periodicals, repair and rebinding, library supplies, and other library expense)

\$1.80 per pupil, kindergarten through 6th grade

\$2.30 per pupil, junior high grades

\$2.80 per pupil, senior high grades

(All these rates include 30 cents per pupil for repair and rebinding)

Library Supplies: \$50 for each school

Periodicals: \$50 for each elementary school

\$60 for each junior high school

\$300 for senior high school

### **Special Allocations**

In addition to the per-pupil allocations listed above, numerous special allocations are made under Class 25, including such items as printing and forms, diplomas, shop lumber and supplies, farm shop supplies, home-economics supplies, and high school art supplies. To take care of emergencies, or needs which may arise in excess of budget allocations, certain contingency allocations are established and transfers are made from these funds to buildings or departments justifying need in excess of regular allocations. For 1956-57 the following contingency allocations were included in the over-all budget: Class 25, Instructional Supplies: \$1,000; Class 27, Textbooks: \$3,500.

### **Operation of the System**

All purchases against the building or department allocations are initiated by requisitions signed by the principal of the building or the supervisor of the department.

Immediately after adoption of the preliminary budget in May, a notice is sent to each principal or department head showing the budget allocation set up for that building or department, itemized by classes. If a principal sets forth evidence that the average enrollment of his building is higher than the figure used in determining his allocation, he may apply for an increased allocation based on actual-average enrollment projected to the end of the current year. An allowance is included in the over-all budget for such increases.

### **Running Unexpended Balance**

Directions on the requisition form require that the estimated cost of each item be entered, and the estimated cost for the page totaled. This total cost is deducted from the previous unexpended balance, shown on the requisition, to give the new unexpended balance.

The principal may, by memorandum to the business office, transfer funds from one of his budget accounts to another provided he has sufficient unexpended balance in another account.

### **Replacements and New Equipment**

We do not make budget allocations for Class 47 or Class 49, Replacements and New Equipment. Each requisition in these categories is considered on its merits as set forth by explanation which accompanies the requisition. However, up to \$100 of the allocations granted in Classes 25, 27, or 28 may be used for Class 47 or Class 49 items. This procedure eliminates the delay of administrative review on minor equipment needs.

### **Balancing the Budget**

To assist principals as well as insure uniformity of cost estimates, we issue a catalog of standard supplies carried in our central stockroom. This catalog is classified and indexed, each item bearing a stock number and cost price, to be used on the requisition form.

One problem in this system has been the manner of reconciling the cost estimates which the principal or department head enters on a requisition, with the actual cost as determined later when an invoice for the materials purchased reaches our office. In the case of requisitions filled from warehouse stocks no reconciliation is necessary, as catalog prices have been determined on the basis of average costs on quantity purchasing. We issue reports about December and April, or at other times if the need arises, showing the total of the estimated costs on requisitions processed and the total actual cost as shown on the invoices arising from such requisitions. The school or department is notified of the additional charge, or credit, so that the unexpended balance records of the school or department may be adjusted.

## Requisition Policies

Unexpended budget balances are not carried over from one year to another, since it would not be feasible to set up reserves in the over-all budget to take care of budget balances being carried over. This regulation leads to stockpiling close to the end of the school year, in order to use up, by requisitioning from the stockroom, general supplies which will be used during the next year. We make no effort to prevent this, although we do issue regulations setting a late spring deadline for requisitioning materials not needed during the current year. Emergency needs are handled regardless of date.

Principals are encouraged to submit, near the close of the school year, so-called "Annual Requisitions," for the bulk of the standard supplies which will be needed during the next year, so that the purchasing department can do quantity purchasing on competitive bids for replenishing stocks in the warehouse for the ensuing year's operation.

Principals are encouraged to submit, near their entire balances too early in the school year, in order that emergency or unanticipated needs may be accommodated late in the school year. No more than 75 per cent of the total allocation for Instructional Supplies, may be used prior to the opening day of school in the fall. This regulation does not apply to books since it may be advisable to requisition the major part of the textbooks and library books before school opens. In case needs arise without sufficient balance to take care of them, the principal may appeal to the superintendent or assistant superintendent for an additional allocation from the contingency funds.

# Tucson Brings Its Insurance Plan Up to Date

MORRIS F. BAUGHMAN

Examiner, Tucson, Ariz., Schools

The comprehensive insurance plan of the Tucson school district was described on page 30 of the November, 1955, JOURNAL. Since that date, a few changes have been made, to take care of problems that developed in the administration of the plan.

It was formerly the policy of the district to provide fire and extended coverage insurance for buildings in the course of construction. It was felt that the lower rates enjoyed by the district on blanket coverage would be an advantage. After much discussion by the board's Insurance Advisory Committee and another committee established to advise the board on architectural and construction practices, it was decided to require contractors to furnish this type of coverage, effective July 1, 1956. This decision resulted partly from a sizable claim for windstorm damage on a building under construction, where the architect and the board disputed the amount of the contractor's claim. When the insurance is carried by the contractor, the board is not involved in approving the amount of any claim.

The district has carried an average clause deficiency policy since the start of the new insurance plan two years ago, to cover new construction in progress. Bookkeeping and premium audit under this policy have

been considerably simplified by requiring the contractors to carry their own course-of-construction insurance, since the district now picks up only the entire cost of a building when it is accepted.

The committee considered the possibility of having the board named as additional insureds on course-of-construction insurance, but advised against this. There was a feeling that a contingent liability might arise in the event of an uninsured loss, caused by a calamity such as an earthquake.

## Vehicle Fire Insurance

The Insurance Advisory Committee had originally recommended dropping all coverage on school vehicles except liability. After a restudy, however, the board was advised to insure its vehicles against fire. This is now being done at a rate of ten cents per \$100.

One other change in automobile policies raised the liability coverage to correspond with the district's comprehensive general liability policy, described in the previous article. New limits are \$10,000 property damage, \$100,000/\$1,000,000 public liability.

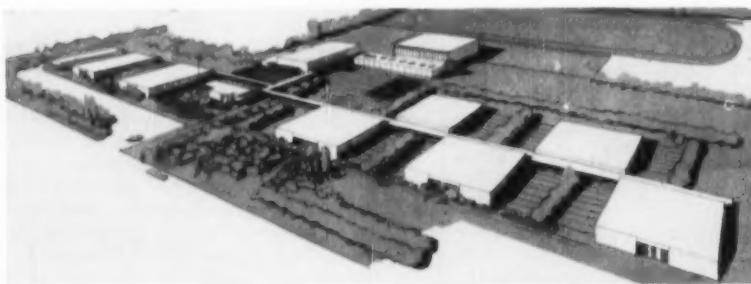
As a result of a rash of break-ins and attempted break-ins, the company carrying the burglary insurance policy declined to renew except on higher rates. The committee recommended that a vandalism and malicious mischief endorsement be added to existing fire and extended coverage policies. This has been done, at a rate of 4 cents per \$100 for five years. Because of the combination with the larger coverage, the rate is considerably better than could be obtained in a separate policy.

The total fire and extended coverage rate on Tucson's buildings and contents, including the vandalism rate, is \$.828 for five years. Total coverage carried, exclusive of the average clause deficiency policy, is \$23,500,000.

The Insurance Committee, after study, advised that renters of the high school stadium be required to furnish evidence of having in effect a minimum of \$10,000 property damage and \$50/\$100,000 public liability. They made this recommendation in addition to suggesting a "hold harmless" clause in lease agreements.

All in all, the Tucson school board feels that it has had excellent service and helpful, impartial advice from its Insurance Advisory Committee, and expects to continue to use the committee to advise it on insurance needs for many years to come.

## Schoolbuilding Preview ...



### A CHECKERBOARD INTERMEDIATE SCHOOL

A checkerboard of square classroom buildings and spacious gardens forms the unusual layout of the Alamitos Intermediate School in Garden Grove, Calif. Stressing the appearance of contemporary houses and an indoor-outdoor relationship through use of sliding glass doors opening off each classroom onto the landscaped courts, the school was designed by Richard J. Neutra and Robert E. Alexander.

# *Dwight Township High School*

**A compact, low-cost high school  
designed to serve 500  
pupils in a small city and  
the surrounding rural area...**

Serving a small city and its surrounding rural areas, the Dwight Township, Ill., high school was planned to house a basic academic-agricultural curriculum. Facilities include 26 teaching stations, with six regular classrooms, 12 special classrooms, two shop areas, and a combined library and study hall. There are also special rooms for guidance, health, social counseling, and



An architect's sketch and view of the front exterior of the Dwight, Ill., Township high school—Bradley and Bradley, Rockford, Ill., architects. Warren D. Kuster is superintendent.



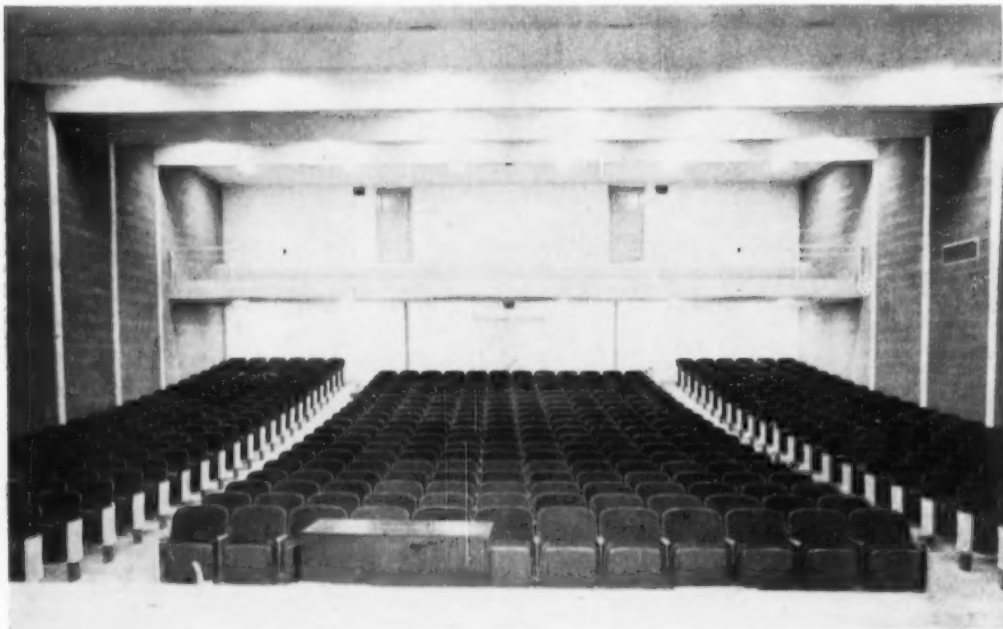


Two views of a typical classroom in the Dwight high school. The flooring is asphalt tile; the ceilings acoustical tile; the walls painted concrete block. The lighting is fluorescent.



Left: The combination library-study hall of the school.

Below: The 40 by 80-foot auditorium which has a seating capacity of 500.







The sewing room (above) is one of the three rooms in the homeliving suite. The typing room (right) with the shorthand, bookkeeping, and business machine rooms comprise the school's commercial department.



Right: The well-lighted, airy woodworking shop of the Dwight school.

Below: The 100 by 110-foot gymnasium which has retractable bleacher seating for 1500.





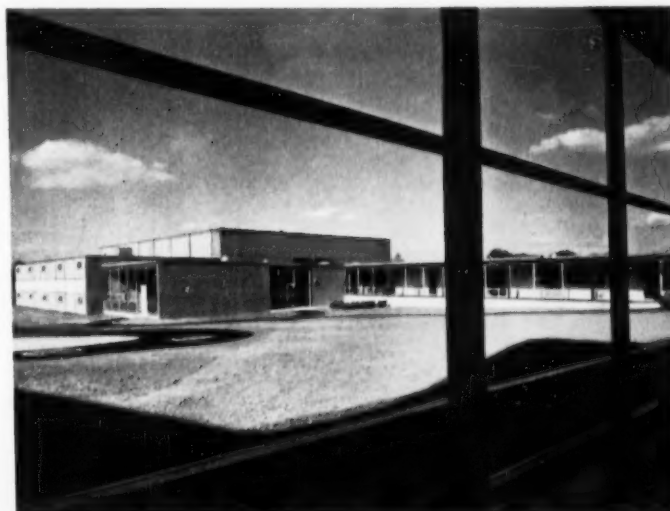


## *West Springfield Senior High School*

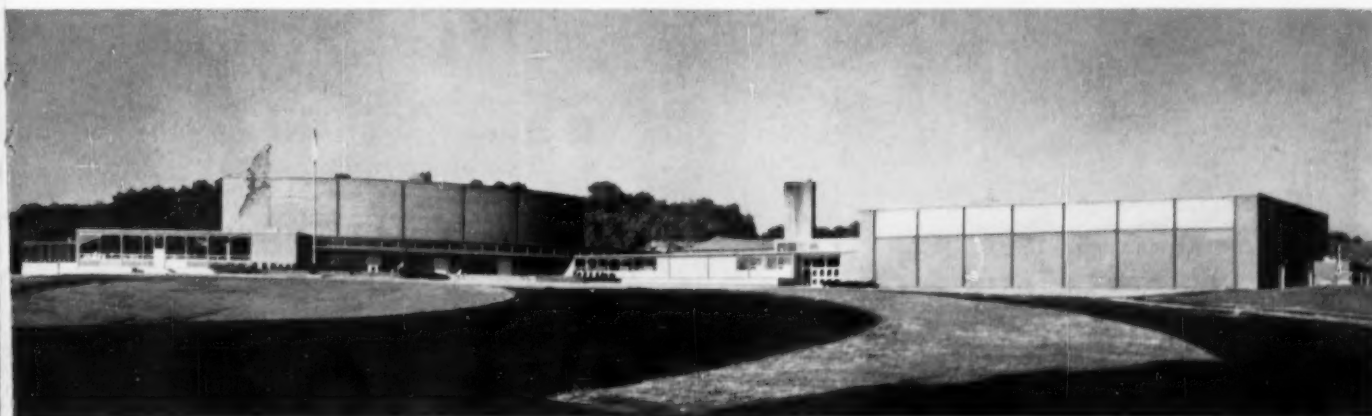
**STANLEY W. WRIGHT**

Superintendent of Schools, West Springfield, Mass.

The West Springfield High School, built to house approximately 1000 pupils in grades 9 to 12, was under construction in October, 1954, and com-



Exterior views of the West Springfield, Mass., senior high school — Warren H. Ashley, architect, West Hartford, Conn. The steel-masonry building has a brick and porcelain panel exterior facing and trim.





The large, spacious arts and crafts room, located in an outside corner of the auditorium section of the school allows an abundance of large windows for good natural lighting.

pleted for occupancy for September, 1956, at a total cost of \$2,910,000 including architect fees, site development, and equipment.

The cost per pupil was \$2,328. The total construction cost was \$2,125,000, giving a square foot cost of \$13.77.

The building area is 154,340 square feet.

The building is located on a 65-acre site, of which approximately 48 acres are improved at a cost of \$286,000. The site was originally bought in 1950 at a cost of \$20,000. The building

was beautifully equipped at a cost of \$260,000.

#### The Site

The site contains a fine physical education area and athletic fields including tennis courts, practice football field,



The elegant auditorium has a seating capacity of 1100 persons for student assemblies and community groups. The library, located on the second floor of the academic wing, has a







One of the two "home arts" rooms of unit kitchens and sewing tables that flank a "living room." These comprise the facilities for the school's extensive homemaking suite.

baseball and softball diamonds, soccer and field hockey areas and a football field equipped with fence and seats for 4000 fans. The football gridiron is surrounded by a quarter mile track built according to the finest specifications. The site also contains a natural area for

the development of science specimens. It is expected that a growing area will be developed for experimental agriculture.

The site has four parking areas, one near the football field, one adjacent to the gymnasium, one teachers' parking area and one pupils' parking area. Hun-

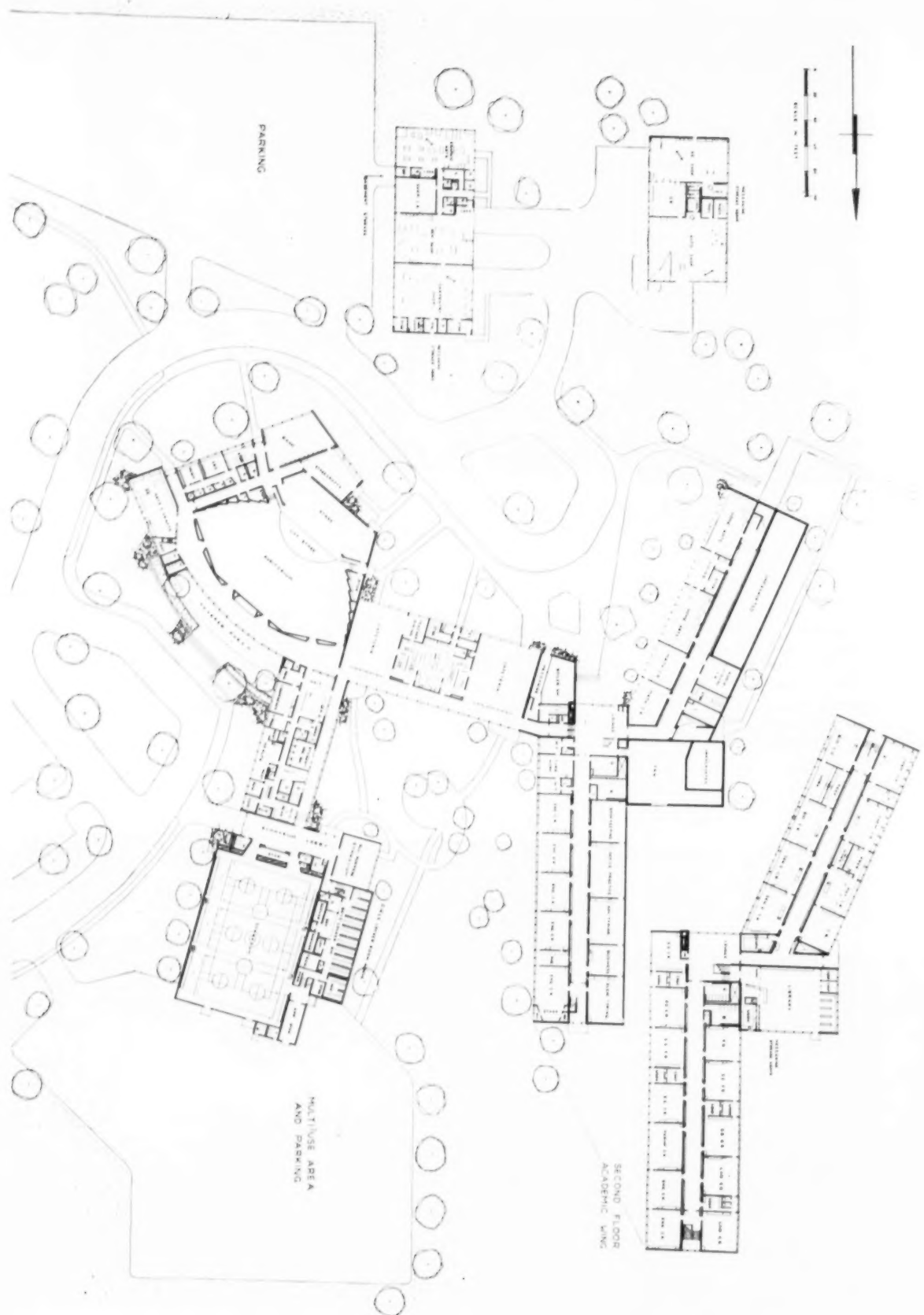
dreds of cars may be parked on the site, a very important consideration in present-day living.

#### **Auditorium, Administration, Gymnasium**

The auditorium, which seats 1100,

working room and several small conference rooms. The band room, situated to the rear of the auditorium, has a unique suspended ceiling to enhance the lighting.





is the pride and joy of local citizens interested in the arts. It is well adapted to adult use as well as pupil activities. The auditorium is surrounded by a stage craft room, a band and choral room, a band instrument room, an art center and offices for the men and women working in the various arts. It is fronted by a large and long lobby with a flagstone floor. A complete wall of glass separates the lobby from the out-of-doors. (Incidentally, there is a very large amount of glass in the building. We worried somewhat about the breakage but in the first year of operation not a single case of breakage has taken place.)

The offices occupy the wing connecting the auditorium and the gymnasium. There is a general office, a principal's office, and a vice-principal's office; quarters for the nurse, the doctor, and the evening school principal; a pupil store, an athletic office, and offices and counseling rooms for guidance.

The gymnasium can be divided into three playing areas. With ample areas for storage, there are upper and lower locker rooms for girls and for boys. The girls' shower rooms are equipped with both gang and private showers. There are exterior wall toilets and rest rooms for pupils using the exterior play areas.

The cafeteria joins the auditorium wing and the classroom areas. The kitchen is in the middle with two pupil cafeterias on either side of the kitchen. Each area seats approximately 250 pupils. There are four service lines in the kitchen and two service lines to the dishwashing area. The teachers have a private cafeteria area located nearby.

#### The Academic Areas

In the center of the classroom area is the new library equipped with not only the usual furniture but also with overstuffed, comfortable seats. The sum of \$18,000 has been appropriated for the purchase of both research and general reading material. There are two pupil conference rooms in the library with glass walls for supervision from the general library area. There are also stacks and workrooms adjacent to the library.

All of the language arts, social studies, and commercial rooms are in the north classroom wing with many of the rooms equipped with adjacent conference rooms, playback listening rooms, and some rooms with platforms for dramatics, debate, etc.

All the sciences, mathematics, and home-economics rooms are in the south classroom area with laboratory experimental facilities on the exterior wall. Ample preparation rooms for the sciences are located between each two

laboratories. There is a growing room between the biology laboratories. The home-economics facilities are of the best to serve the girls making homemaking their primary object.

#### The Industrial-Arts Department

Shop No. 1, recently named the William J. Burns Memorial Shop, houses the general shop, woodworking area, metalwork, printing and mechanical drawing. Outstanding is the use of the mezzanine areas for the storage of projects often not well taken care of in shop areas.

Shop No. 2, recently named the William J. O'Malley Memorial Shop, houses agriculture areas and the auto mechanics shop with a classroom between the two general areas. There are also shower and locker facilities provided.

West Springfield is proud to have provided its young people with this new high school, three new elementary schools, and an elementary addition, in the past half dozen years. In the same period, many of the older buildings have been renovated to better provide a modern education for the youth of the community.

A view of the stairway-corridor at the right illustrates the brick and cinder block finish of the areas.

The kitchen, shown below, serves two cafeterias which seat 250 students each. A teacher's cafeteria is also available.



# Plan, Promote, and Build Together

KENNETH E. FORD

Vice-Principal, Lowville Academy, Lowville, N. Y.

The problem of providing proper school facilities for the constantly increasing pupil population is one that nearly every school district has had to face in recent years. Although each community is confronted with different problems, a common factor has emerged—citizens are concerned about their schools and their responsibility to improve them.

A large number of lay people from various areas and walks of life can contribute recommendations to the board of education. The more people involved in the planning of a program, the better is the understanding of the program and the greater is the support of the proposals. A citizens committee is in a position to convey the needs of the school to the rest of the people in the district in a manner which the board of education or school professional staff never could do alone. When the problem of construction arises the board of education, the superintendent, and the lay people are realizing that by working together they can accomplish their objective more satisfactorily.

When a building program confronts the average board, it has neither the time, the effort, nor the background to carry out the program alone. The board must see a need, however, before requesting the assistance of a lay group. An effective citizens committee comes into being because the board of education requests it. The committee should be selected at the outset of the building program. Continuous lay participation should extend from the moment of site consideration to the vote for the bond issue.

## Committee Selection

The method of selecting a committee will, in general, depend upon the community. However, a method found effective in many districts is by joint selection of the board of education and other organizations such as: church groups, fraternal groups, service groups and others.

The number of people on a committee will vary according to the size of the community and the scope of the project under consideration. A desirable size in most instances is a committee of 25 to 50 members. Regardless of how small a district is, a working group of less than 25 section of the community, socially, religiously, or economically. At the other extreme a committee of more than 50 is likely to be too large to work effectively. Some very large districts may need a larger number in order to include all groups.

People chosen for the committee should be individuals with vision and long-range objectives. They should be leaders in the community and command respect for their judgment and decisions. The committee should have representatives from all areas in the district and from all economic levels. As many parents of school children and pre-school children as possible should be asked to serve on the committee. Also teachers should be included on the committee as factual consultants, not as active members in promoting the program. In central districts rural people should be fully represented on the committee. Experience has shown that people opposed to the building program should be invited and encouraged to serve. Being a participant gives one an opportunity to know and understand the problem better, and in turn to become a well-informed and supporting member.

In any endeavor such as a building program where the public is asked to assist the board of education, there should be a clear-cut understanding on the part of each party as to what the board expects of the committee. The committee should act in an advisory capacity only, and should submit its recommendations to the board of education for consideration. The board is the responsible body for presenting any proposed building program to the people of the district.

## Committee Organization

Each community faces problems peculiar to it. Therefore, no definite pattern of organization of the committee can be recommended. However, after the committee has been initiated, the group should elect a chairman who will work for the best interests of the school, and whose judgment is respected by those working with him. Further, regardless of the scope of the problem under consideration, the committee should be organized to include sub-committees to work on such matters as need, site, building, and publicity. Publicity is perhaps one of the most important areas of consideration. The sub-committee on publicity must always be on the alert, and accept the responsibility of seeing that the general public is properly informed at all times.

During the entire project, full co-operation is a paramount factor for both the board and the committee to keep in mind. Working co-operatively in the planning, developing, and preparing the final recommendations contributes toward a successful venture.

In a building program the board of education should produce the basic information including all the facts, and the citizens committee develop it. It is important that the board of education respect the opinions of the citizens committee at all times. If its recommendations are accepted and adopted whenever possible, members of the committee will feel they have made a real contribution. Also, committee members will be more willing to serve on other school projects which may arise after the new building is completed.

One way of informing the lay public of the needs of the school is to have key members of the citizens committee hold small group meetings in the village or city. In central districts where one-room schools are still operating, district meetings should be held in the respective districts. Another method found to be very effective is door-to-door canvass by informed committee members. Face-to-face conversation is one of the best means of informing the lay public. A well-informed citizens committee can carry the message of the school building program to every corner of the district by personal communication.

After all the facts have been studied and definite plans have been decided upon in co-operation with the board of education and the architect, the committee should prepare a simple but attractive brochure giving the amount of the bond issue, list

## Form Your Lay Schoolbuilding Committee Properly—

Select from 25 to 50 community leaders jointly with church, civic, fraternal groups . . . let the committee understand

its advisory purpose . . . Organize the committee with

- a chairman and sub-committees . . . have the

committee inform its fellow citizens about the progress

in planning the new school building.



ing the proposed tax rate on full valuation (not to exceed five years hence), a sketch of the proposed building or buildings, a brief description of the various departments in the new building, voters' qualifications, places for voting, time and date, and a brief recommendation of the project from the committee.

After the bond issue has been favorably voted, the committee should be discharged with appreciation and thanks. A committee with no specific objective may become rest-

less, and may attempt to deal with problems that are of a purely administrative nature. Should new problems develop in which lay assistance becomes necessary the board should ask for a new committee.

Research has shown that citizens committees are *not* formed to take over the duties of the board of education. Lay people want better schools for their children and they are willing to devote time and effort to assist the school board in achieving them.

## A report on the procedures involved in—

# Planning School Buildings in Baltimore

The planning of new school buildings erected in the city of Baltimore, Md., involves an interesting series of studies which take in numerous aspects of population, site, educational program, functional arrangement, and total architectural economics. In the recently published 121st report of the Board of School Commissioners for Baltimore City, the several steps of the process are outlined and the scientific as well as practical administrative bases are discussed.

The school-building construction program of Baltimore is a continuous one and is periodically reviewed and revised to meet the constantly changing conditions. Sites are acquired in advance of actual building construction and are based on carefully considered studies of population movements. The selection is based not only on scientific studies of population but also on such factors as builders' announcements, the plans of the Urban Renewal Authority, of federal and local housing authorities, and of the Municipal Department of Planning. The master plan of the last-mentioned authority always includes school buildings.

When a site has been selected a definite plan of utilization is prepared in co-operation with such city departments as the Health Department, the Housing Authority, and the Board of School Commissioner's educational department and its Bureau of Plans and Services.

### Initial Building Planning

The 121st report of the Board of School Commissioners outlines the elements of planning as follows:

When the decision has been reached that a building shall be erected on a site, a schedule of facilities based on the findings

of population studies is determined and the development of the plans for the building follows. First, an accurate survey of the site is made, establishing its dimensions, topography, and the location of sewers, water mains, and electric lines. The nature of the soil with respect to its ability to bear the load of the proposed building also must be ascertained. Upon completion of the survey by the local Bureau of Surveys, and after the profile of the building has been determined, borings are made into the ground and the undersurface soil and rock are analyzed and tabulated to enable the structural engineers to provide adequate foundations.

Then, the functional arrangement of the building is developed and studied carefully to insure that the various elements—standard classrooms, special facilities, auditorium, gymnasium, and cafeteria—bear proper relation to each other. This planning reviews the provisions for practical and efficient movement of traffic within the building, the safety and convenience of its approaches, and the accessibility of areas which require delivery service. The extent and directions of additions which may be needed in the future are located, so that they may be erected without replacing major services, or stairwells, or two or more classrooms. The building itself must be located with respect to the boundaries of its site that a maximum amount of acreage may be conserved for playground purposes and so adapted to the topography of its site that maximum construction may be obtained with a minimum of earth movement. Upon approval of preliminary drawings, detailed planning begins.

The development of a set of plans for a large and complicated school involves about a year's work on the part of the architect and his associated structural, mechanical, and electrical engineers, all working on their special phases of the specifications. Finally, the work of these three offices is co-ordinated and one final set of plans and specifications is produced.

### Selection of Materials

The objective in this planning stage is the production of a building that will provide maximum educational usefulness at a minimum initial construction cost consistent with only a minimum charge for maintenance over the years of its active educational life. Careful attention is given to finishes and materials, such as cinder block or tile that require no further treatment and can serve more than one purpose. Extensive use is made of the principle of modular co-ordination by which construction units are laid out in terms of the standard sizes and shapes of building materials established by the manufacturers. Building cubage and perimeter are kept to a minimum. Simplicity and mass that results from functional arrangement are relied upon for beauty and economy. Materials are selected which will reduce direct labor costs and shorten the time of construction. By a continuous search for new and improved materials and construction methods, and for equipment that is efficient and economical, and by the avoidance of expensive ornamentation, the costs of new buildings have been kept within the middle range of nationwide costs.

After the contract drawings and documents have been completed under the city charter they must pass from the Department of Education to the director of Public Works. Here the Bureau of Building Construction advertises the project for bids, lets the contract, and supervises the construction. Time required for construction will vary from a year to two and a half years. When the contract has been let, thirty-five of the thirty-seven steps necessary to erect a public building in Baltimore have been completed.

### Economy of Cost

Planning with attention to such detail results in minimum unit cost whether the unit be classroom or pupil per square foot, or pupil per cubic foot. A further element that helps to determine the cost of construction is the attractiveness of the project for bidders. Plans and specifications are carefully prepared so that bidders may know precisely what is required and thus eliminate from their bids unnecessary allowances for contingencies. Competition upon school bids is assured and favorable low bids ensue.

For fire-resistive elementary school buildings—buildings composed principally of steel or reinforced concrete in which all inflammable materials are kept to a minimum, leaving only furniture and the paint on the wall subject to flame—average construction costs in this region were found by the U. S. Office of Education to be \$18.79 per square foot. The large elementary schools erected so far in the Baltimore building program averaged \$16.79 per square foot, or 10.65 per cent less than the average of the northeastern states.

Junior high school costs in the same area were shown to be \$17.58 per square foot against Baltimore's \$15.38, or 12.5 per cent less. The senior high schools and the technical high schools built so far have cost Baltimore \$17.26 per square foot as compared with \$20.85 in other eastern states, or 17 per cent less.

In a study by the National Education Association in which costs were figured on a per-cubic-foot basis, an average of \$1.10 per cubic foot was established for a fire-resistive structure of approximately 24 classrooms, auditorium, gymnasium, and cafeteria. In Baltimore the average on this basis was 99½ cents per cubic foot, or 9.5 per cent less than the average of those buildings studied by the NEA.

# THE SCHOOL PLANT

## Good Purchasing and Warehousing Practices

MONROE MELTON

Director of Purchasing, Supplies, and Equipment, Dade County, Fla., Schools

Efficient operation\* in purchasing and warehousing and closely associated divisions require certain carefully developed and efficiently operated practices. The following are selected as among the most important:

### Survey, Compare, and Select

Since the era of the depression the school system is rare which has been able to catch up, and keep up with new buildings and the modernization of old buildings, and with equipment and supplies to meet the needs of the growing school population, and the ever changing methods of teaching and learning. Revenues are never adequate to do all the things which need to be done.

So what shall be selected for improvement first? And what part of that selected can be done from the current budget? To select on the basis of favoritism, or in response to some pressure group, usually will be inimical to the needs of the children generally, and therefore morally wrong. The right answers can be secured by surveying to discover the actual needs from the educational point of view. By comparison, select those areas where more pressing needs exist.

### Program

After the areas of operation have been selected, it is necessary to determine a program of operation for each area. Can the work be done in one, or two, or three years? Or will it take longer for some of the areas? The answer will be determined by the acuteness of the need and, again, by the limitations of the budget. Let me illustrate with a program of replacement of antiquated seats in the Dade County system.

A survey indicated some 40,000 desks should be replaced as soon as financial conditions would permit. Budgetary limitations indicated a three-year program. By comparison it was determined that needs were not in the order of grade levels, nor by the elementary, or junior, or senior high school divisions, but by buildings.

The same steps were used in determining the location, construction, and equipping of more than 60 new buildings, at a cost of \$34,500,000 over a three-year program, but because of the ever increasing development areas, not all locations for the second and third years have been selected. From last

September to next September, we shall have completed and have 25 of these buildings ready for use. The hit or miss method of procedure is wasteful, and likely to be unfair. A well-developed program, even though changing conditions may not permit strict adherence to it, or even completion of it, has much to commend it.

### Organize

The organization is the vehicle with which the program is carried out. The assignments of trained personnel and the use of properly selected equipment, and the smooth articulation of departments and divisions determine the efficiency and economy with which a program is operated.

### Schedule

The practices cited above are introductory and in actual practice are preliminary to the schedule. A well-planned schedule is the best expediter. It keeps the production machinery in operation without loss at points where functions change. It produces a steady and even flow of the work load. It is comparable to the assembly-line production in a modern factory. Let me illustrate with a supplies schedule running through six divisions in the Dade County school system. It runs an unbroken complete cycle from the schools to the schools.

For the economic advantages of out-of-season buying and for the assurance that the needed supplies will be in the schools when they open in September, our schedule was initiated in December by sending approved budgetary formulas and needed forms to the principals and supervisors in special education areas with the instruction to return them not later than January 15 to the purchasing division. On this date the purchasing division began processing the lists received.

From previous experience it was known which items of supplies required more time for vendors to contact their manufacturers and wholesalers to secure advantageous prices, and how long it would require to make deliveries after contracts had been executed. These factors determine the dates and sequence for calling for bids and fixing delivery dates for the several categories. In order to keep the work load at or near an average level and, since the Dade County board meets every first and third Wednesdays of each month, dates for returning the bids and recommending awards two weeks later were determined. Also the dates for delivery for each cat-

egory of supplies at the supplies warehouse were determined and made part of the specifications.

These scheduled dates determine the schedule of the dates on which each group of supplies will be checked for quantity and quality, distributed for the schools and loaded on the trucks for delivery to the schools. The schedule secures an even and steady flow of the work load for the warehousing and distribution division. It may be observed that the term *warehouse* is a misnomer for our plan of operation. *Receiving and distributing center* would be more appropriate.

Receipts from the warehouse permit a steady flow of work for the invoice and accounting divisions, and those from the truckmen as they deliver to the schools furnish a steady flow for the inventories division. The schedules of the other five divisions are a corollary to and a necessary sequence to that of the purchasing division.

Of course, no complex schedule will work as smoothly as the above description may have sounded. There are too many factors involved, too many persons, and too many agencies controlled by the board only with a performance bond. An expediter from the time required lists are requested from the principals and other personnel to the delivery of the commodities to the schools is quite a necessity for a large program. He needs to give constant attention to the points of articulation between the divisions, and special attention to the delivery dates specified and included in the vendors' contracts.

### In Summary

Good practices in warehousing and purchasing, and the other divisions directly associated, include

1. Survey, compare, and select for new buildings, and renovation and replacements in old buildings. Without this background of dependable information, purchasing and warehousing function from loose ends in these areas.
2. Long range programming is necessary for economy and efficiency.
3. A carefully planned organization is a "must."
4. A carefully developed schedule, smoothly operated and faithfully executed, is invaluable.
5. With modern methods of buying, the main functions of the warehouse become, perforce, a receiving and checking, and distribution center.

\*Adapted from an address given by the author at the Southeastern Business Officials Convention, Francis Marion Hotel, Charleston, S. C., April 4, 1957.

## The Centennial of the NEA

EDWARD A. FITZPATRICK

In the first article<sup>1</sup> we reported the story of the National Education Association (NEA) as told by Edgar B. Wesley in his centennial history of the Association. In the first article we pointed out the significance of the NEA as a national forum and clearinghouse of ideas, and intimated that the 19,000 speeches delivered in the one hundred years of the Association's existence had hardly the results claimed. We said something about the committees, commissions, and the resolutions and the Association's "lost causes."

### Membership of the NEA

The History has two interesting parts, the second of which we will discuss in this article on the development of American education and educational reform. As background here we should note that in the first 14 years (1857 to 1871), there were less than 200 members of the Association, and in the first anniversary meeting (1858), among the many in attendance, there were only five persons who were actually members. "By keeping the secretary on the platform by his side, scattering the other three members throughout the hall, he (the president) was able to keep the audience totally unaware of the actual status of member attendance" (p. 26). In 1884 the membership was 2729, the next year it was 625, and in 1886 it was 1197. It was 9115 in 1887, but ten years later it was centering in the one-thousands. After 50 years (1907) it reached the five-thousand mark, and fluctuated from year to year, but kept growing until in 1956 it was 659,190—about half the number of teachers in the United States.

### Change in Policy on Teacher Welfare

The growth is explained by the increasing interest of the NEA in teacher welfare, which was accompanied by such things as the 19th Amendment, and certain school practices of administrators. There was a radical change of policy in the second fifty years, compared to the first fifty years.

<sup>1</sup>Wesley, Edgar B., *NEA: The First Hundred Years* (New York: Harper & Brothers, 1957). Part I of this review was published in the August issue, pp. 49-51.

"The educators seem to have been exasperatingly consistent in believing that teacher welfare would result from education rather than direct action. In achieving a satisfactory result this policy may have validity even today" (p. 336). The change is thus described in the volume, p. 337:

During the NEA's second half-century, the story changed dramatically. Teachers, administrators, professors, and all other educators came to look to the NEA and its state and local affiliates as the principal means through which they could help themselves to gain recognition and status, tenure and freedom, better conditions of work, increased remuneration, and security for old age. By 1910 the NEA was demonstrating some interest in teacher welfare; in the 1920's it was vigorously advocating higher salaries and tenure laws; in the 1940's it became almost militant in its defense of teachers and their rights; and in the 1950's the NEA was leading the teachers' demands for professional standards and for more reasonable work loads, as well as for continued improvement in economic status.

### Development of American Education

Six chapters of the History are devoted to the development of American education, telling the story of the high schools, normal schools, and colleges and universities. A chapter is devoted to the changing curriculum, and there are two other chapters describing, first, the exhibits at the conventions, which used to consist of sample pupils' work, and now consist of the amazing and extensive commercial exhibits of schoolbooks, equipment, visual aids, school buses, and everything used in and in connection with schools. A final chapter in this section of the book shows in every generation the "Hails and Wails" about public education, pertinent and impertinent, without basis and well supported.

### Elementary Education Before 1857

Two things are noteworthy in connection with the discussion of the development of American education. The first is that though the high school, normal school, and the college are given chapters, no chapter is given to the elementary school. And the

reason given is adequate, though it indicates that the development occurred before the NEA came into existence and consequently the NEA played no part in the development. After noting the influence on secondary education, Dr. Wesley says: "No such national forum or guiding influence (as the NEA) had had a part in the earlier history of the building of state systems of universal free public elementary schools. The key chapters in this earlier history had been largely written before 1857" (p. 59)—the year of the founding of the NEA.

### Educational Development Before 1857

The other significant fact was the momentum of educational progress or growth before 1857. At the first anniversary meeting in Cincinnati, August, 1858, Professor Daniel Read enumerated and described 12 developments of American education before the NEA came into existence:

1. The organization of state departments of education
2. The founding and spread of normal schools
3. The rise of teachers' institutes—"purely American in origin"
4. The work of teachers' associations
5. The multiplication of books on education
6. The development of educational journals (referred to Barnard's *Journal* as being the foremost in the world)
7. The improvement of textbooks
8. The erection of better school buildings
9. The growth of libraries
10. The grading of schools
11. The development of women's education
12. The training of the deaf, blind, and feeble-minded (pp. 27-28).

### The Rise of the High School

Especially interesting is the high school story: "The dramatic success story of American education is the rise of the high school" (p. 59). The author says the story was "written in a considerable measure by the discussions and actions of the Association," but the "acceptance by the



American people of the ideal of secondary education for all youth was the result of numerous indigenous local efforts." It would have been more accurate to say that the primary cause was the "indigenous local efforts." The description of the development of the high school is more accurate than most descriptions.

In spite of the lack of consensus as to their proper functions, the high schools continued to serve various purposes. Democratic, untrammelled by tradition, rooted in local situations, sensitive to popular demands, relatively free to evolve as conditions warranted, they began their spectacular rise. While the various names, varying number of years of work offered, and unsettled purposes made identification and enumeration of the early high schools nearly impossible, it is probable that there were about 60 by 1850, and about 325 by 1860. Following the Civil War, the number increased rapidly, as has been shown above. From Maine came the report that the high schools were absorbing both faculties and students from the academies. From New Jersey came the shamed apology that Jersey City, with 100,000 people, had not one high school. In 1890 the nation had 2,526 high schools and about ten times that many half a century later (p. 65).

### Problems of High School Development

The problems which were continually present in this development have been excellently summarized:

From lowly origins in the 1820's, the American high school rose in a few decades to become education's darling and problem child. Was it an imitation of the academy or was it a new creation? Was it an arm of the state, a supplement to the home, an ally of the church, a prelude to vocations, an agent of culture, or a servant of the colleges? Was it dedicated to citizenship, vocational utility, ethical standards, social efficiency, mental discipline, college preparation or general culture, or was it primarily a waiting room for maturity? (p. 59.)

### Three Periods in the Development of High Schools

The first period of development of the high school was the period of relative freedom, experimentation, and self-discovery (1865-93), which "had the movement continued, it might have provided an indigenous institution that would have faithfully reflected and aided the growth of American culture" (p. 66). But the principal instrument in beginning a second period when the high school was made an appendage to the college, was the report of the NEA's Committee of Ten:

Many speeches in the NEA reveal this conception of the high school as merely college preparatory school (1893-1910). A third period was signalled by the appointment of the Committee on Articulation of the High School and College (1910), and the Commission on the Reorganization of Secondary Education, (1918) — committees giving expression to forces already in the indigenous local schools. The occasional extravagance of this history is indicated in the sentence about the report of the Reorganization Committee on the "Seven Cardinal Principles of Education," (1918). "Probably no publication in the history of education ever surpassed this little five cent, thirty-two-page booklet in

importance, both because of its fundamental nature and because of its influence (p. 75). It is strange that there is no mention of the Life Adjustment Education Program.

Many factors entered into the high school development, and among those mentioned are: (1) raising the compulsory school age, (2) the admission of girls, (3) the downfall of formal discipline, (4) improved understanding of child nature or growth, (5) recognition of other aims beside the college preparatory and the extension of educational opportunity.

It is interesting to note that proposals to begin secondary education studies in the upper grades began to appear as early as the 1880's; and the Committee of Ten (1893) included it in its recommendations.

### Development of Teacher Training Institutions

Some interesting sidelights are presented on the development of teacher training in the chapter on "Normal Schools and Teachers' Colleges." There were three ideas dominant in the early normal schools which had one- or two-year courses, and whose students were infrequently high school graduates. The normal school was (1) academic, giving the student more knowledge, or (2) it professionalized the knowledge taught, especially in elementary schools, and (3) it was predominantly, if not entirely, concerned with pedagogy. Teachers in rural schools and the city elementary schools were always a concern of the normal school. These schools were almost entirely public schools, and farmers were strong in most legislatures.

So far as sponsorship was concerned, there were (1) state normal schools such as Mann established in Massachusetts, (2) city normal schools such as were established as early as 1857 in St. Louis and San Francisco, and earlier in Boston and New York, and other cities, and (3) private schools run as businesses — the commercial normal schools. In the 1890's Wisconsin established the county normal schools with state aid.

There were two significant developments on normal schools.

1. In the first half of the twentieth century, normal schools were made over (without too much change) into four-year teachers' colleges with degree granting powers, though in 1882, according to the text, the normal school at Livingston, Ala., became a state teachers' college.

2. The second transition now under way is the transformation of the state teachers' college into a state college — a school of general education, as well as a college for the professional training of teachers. Universities were not too eager to assume the professional training of teachers, but they did prepare teachers largely for secondary schools. The normal schools also entered this field too, though in the earlier period they were concerned largely with elementary education. The situation today is thus presented:

By 1890 the period when any type of institution had a monopoly on the preparation of teachers for any teaching level or field had ended. Teachers were being prepared in all types of institutions. This trend toward diffusion of the responsibilities for teacher education is reflected in a 1952 report published in

the NEA's *Journal of Teacher Education*. This report showed that, of all graduates completing preparation for teaching in 1949-1950, teachers' colleges prepared 33.5 per cent of the elementary-school teachers, and 16.8 per cent of the high-school teachers; public colleges and universities prepared 31.1 per cent of the elementary-school teachers, and 40.2 per cent of the high-school teachers; private colleges and universities prepared 28.3 per cent of the elementary teachers, and 38.9 per cent of the high-school teachers; and the remainder were prepared by professional and technical schools and by junior colleges (p. 91).

### The Advance of Higher Education

The chapter on "The Advance of Higher Education" is taken up largely with a discussion of the classics and the cultural aim for the colleges. Colleges and universities had "halos," "charms," "auras of mystery," served exalted functions and met diverse expectations. "The colleges emerged as islands of culture, refinement, and neutrality, in the sea of politics and sectarianism" (p. 93). However, the stark reality concerning colleges made the growth and maintenance, and popular respect all the more remarkable. "On the basis of income, buildings, libraries, courses, number and quality of students, and scholarship of the faculty, only a small fraction of the colleges merited the name" (p. 94). Law, medicine, commerce, art, journalism, home economics, business administration, were added to the college curriculum, yet "contrary to theory, tradition, and custom, and in face of the stout defenders of liberal education, the colleges became vocational schools for many of their students" (p. 96). College leaders, in the face of the vocational development, "insisted that their institutions emphasized spiritual values, character, culture, manhood and womanhood, mental development, power, and other abstract qualities" (p. 96).

### The Latin and Greek Issue

Judged by the number of speeches and the intensity of feelings revealed, the study of Latin and Greek was the most important issue in higher and secondary education during the first half century of the NEA (1857-1907). The virtues of Latin and Greek were many — they contributed to understanding English and the modern languages, to scientific nomenclature, and they disciplined, strengthened, and refined the mind. An argument often used was that being "dry, uninteresting, and unappealing," the classical languages were ideal for mental discipline and training the will. The critics lambasted the classicists with epithets galore; "barren gymnastic theory," "gerund grinding," "scholastic pedantry," "grindstone theory," and "the dead and buried words of dead and buried tongues expressing dead and buried thoughts." The explanation of the decline of the classics, our author says was not due to the reasons assigned; rebellious students, poor teaching, the elective system nor the critics. It was the increase of knowledge and particularly the sciences, increased interest in English and the foreign languages, a better understanding of the psychology of learning, and the changes in the curriculum growing out of the social situation (p. 100).



## Changes in Curriculum Content

Perhaps one of the best chapters in the book, at least one of the most suggestive and informing, is the one on "The Changing Curriculum" (Chap. 9). There is an excellent statement of the subjects that were most frequently discussed which follows:

A complete list of the proposed changes during the hundred years could scarcely be compiled, but the ones that received major attention during the century are easily identified. First in frequency and popularity was the demand for the teaching of citizenship. This word gathered a cluster of associated concepts such as patriotism, loyalty, law observance, democracy, the Constitution, and Americanization. Perhaps second in frequency of advocacy and persistence was health. This word was often used to include physical and mental hygiene, gymnastic exercises, and physical education in all its variations. Brief views of the efforts to secure places in the curriculum for these two objectives—citizenship and health—will illustrate the process that was used to introduce dozens of similar topics and activities (p. 117).

## Methods of Curriculum Change

The changes that were made or proposed are put succinctly in this paragraph:

Through the years both the curriculum and the process of making it changed fundamentally. The guidance of tradition, the influence of abstract principles, the weight of authority, and the enumeration of opinions gradually lost favor and were replaced by studies of the social setting, the principles of learning, and student activities. Old, inert portions were discarded from all subjects, and the remaining portions were reorganized. The fixed course of study was replaced by a changing, growing body of information, enriched and expanded by a great variety of meaningful activities. While basic skills and minimum information were never slighted, they were put into more appealing context. Curriculum-making has become a continuing activity, involving all members of the teaching profession and guided constructively by able leadership such as that provided by the NEA—and especially by several NEA departments (p. 122).

## Specific Curriculum Developments

There are, too, especially interesting and oftentimes significant comments:

1. The revolutionary idea in Count's "Dare the School Build a New Social Order?" was anticipated somewhat in idea though not in method, and the society was conditioning the school in such a way as to make the school ineffective.

a) Teachers should rate themselves not as leaders of children but as makers of society. — Albion W. Small (p. 110).

b) "It is a fallacy to suppose that radical reform can be gotten in the school and from hence revolutionize the whole. The reform sought must be developed along the line in order that it be possible anywhere. With society superficial and false and government corrupt it is simply impossible that the school should be in wholesome condition" (p. 110).

2. "Curriculum-makers were attempting to co-ordinate social ideals, state policies, individual freedom, and general welfare.

3. "Reading, about which the public critics had been lately so articulate was too often word-calling instead of sense getting" (p. 110).

4. "The seven subjects of the elementary school program—spelling, reading, writing, arithmetic, geography, grammar, and American history—had won their places by chance and had been confirmed by the industry and ingenuity of authors and publishers and the inertia of educators" (p. 111).

5. The overcrowding of the curriculum in elementary school and in high school went on apace.

6. "Arithmetic has thus become a science of difficult trifles and intricate fooleries peculiar to common schools, and remarkable chiefly for sterility and ill-adaptedness to any useful purpose" (p. 112).

7. When an elementary pupil has mastered the spelling correctly of the few words he is likely to need in composition during life he has well nigh exhausted the value of the subject to him. To study the 10,000 words in the spelling book was a waste of time.

8. The temperance reformers were among the first to introduce the vicious practice of having the curriculum made by the state legislature.

9. Curriculum-making stirred up a great amount of activity in "surveys, objective studies, yearbooks, and articles in the 1920's and 1930's.

10. Curriculum emerged as a distinct professional study after the founding of the Society for Curriculum Studies in 1924.

11. Beginning in the 1920's, the teacher played a larger role in curriculum-making.

12. We conclude this section with a few of the very significant comments on citizenship training.

a) To make the end of public instruction the development of manhood is a broader view than to regard it as training for citizenship. The school does not exist for the state; good citizenship is not the end; it is not the end of the school or any other institution." E. E. White (p. 118).

b) "Education has higher aims than citizenship; it makes men and reconstructs states." —James H. Baker (p. 118).

c) "It is good to be a true American; it is greater to be a true man or woman here or anywhere." —Andrew F. West (p. 118).

d) "In 1875 President W. W. Folwell of the University of Minnesota rejected the plea that the state should educate the citizens for its own perpetuation. Such a policy rested, he said, on the debatable assumption that the state deserved perpetuation" (p. 118).

## Educational Reforms Discussed

The part of the volume called "Educational Reform," discusses object teaching, the kindergarten, child study, coeducation which was early settled practically, and the Herbartian and Progressive movements. Space does not permit the detailed discussions of these subjects, though their listing here indicates, if the reader is interested in the subject, the chapters that are worth reading. Only the most general comment is possible and that in the words of the author. They relate to three topics: (1) Why is reform necessary? (2) Reforms do arise, blending traditional practices and effective reforms. (3) and, reform does have its effect.

## Why Educational Reformers

Now, first, Why is reform necessary, and our author wisely tells us:

Why were so many reforms necessary? What is the lowest level toward which education is constantly slipping? The condition from which the schools must be constantly rescued can be described rather than labeled. It is the condition in which information and a well-stocked memory are accepted as the desirable outcomes instead of skills, processes, understanding, character, and social competence; in which buildings, supplies, and books are inadequate; in which poorly trained teachers are weak in scholarship, method, the psychology of learning, and understanding of children; in which routine assignments, formal recitations, and external conformity are mistaken for educational realities; in which preparation for the next grade or school predominates over the development of personality and preparation for life; in which society imposes alien and extraneous functions upon the schools or in which the schools assume unwarranted obligations (p. 150).

And a reasonable number of dissatisfied and resourceful men do appear; propose the changes and ultimately even enough support to blend tradition and reform.

## Educational Reformers Help

And what is the ultimate result? And on this satisfying note we close:

The critics won a kind of victory. A few conscientious professional educators, publicity-seeking writers, academics who had strayed beyond their competence, enemies of public education, and organizations nourished by discontent, achieved the downfall of progressive education as an organized movement. With all their animus and influence, however, they could not resubjugate children, repeal the laws of learning, destroy projects, problems, and units, reinstate arid drills, reimpose fruitless tasks, push teachers back into subservience, restore the so-called liberal education, or convince anyone, child or adult, of the all-sufficiency of the three R's; they could not reverse time or restore the past. The progressive gains of a century could not be destroyed. Pestalozzi, Sheldon, Froebel, Parker, Dewey, and a host of educational reforms still live (p. 204).



# Salute to Teachers

ELAINE EXTON

When schools open this fall the teachers of the nation will be welcoming new students into their classrooms for the one hundredth time since the organized teaching profession was founded in America on August 26, 1857, in Philadelphia.

They do so at a period which U. S. Commissioner of Education Lawrence G. Derthick has characterized as "the greatest time in history for teachers" when the prospects for advancing the cause of education are almost unlimited.

It is also a time when, as Leon J. Obermayer, president of the Philadelphia board of education, reminded NEA convention-goers revisiting the scenes of the Association's beginnings, "the public, as never before, must stand close to the schools and must become involved in activities that are designed to promote the maximum development of democracy's greatest resource—its children" because of pressing problems of high enrollments, teacher shortages, school building needs, and rising costs of education.

### Public Interest High

Fortunately, to the unflagging efforts of organizations like the U. S. Office of Education and the National Congress of Parents and Teachers in bringing the educational accomplishments and needs of our country to public attention there have been added in recent years the work of the National Citizens Council for Better Schools,

the discussions of the White House Conference on Education and its affiliated state and local meetings, and the activities of the National Education Association's Centennial Celebration so that general public interest in educational problems is high.

The growth in the number of articles on education in popular magazines, which has been steadily rising in recent years, is one barometer of the public's concern. Three times as many are being published this year as in 1950, according to the Educational Research Service of NEA.

An increase in television coverage on education has also been noticeable. In the past 12 months this has ranged from news summaries by well-known commentators to shows that interpret the role of education in national affairs, American history, and international relations. Differing views on such controversial issues as academic freedom and federal aid to education have been aired on television channels and teachers and their significance have been presented in a variety of ways on television programs.

### Centennial Activities

In celebrating its centennial, NEA has trained the spotlight of publicity on schools and teachers through diverse means. More than 1200 local education associations in communities across the nation participated in its Birthday Party on April 4 which garnered tributes from mayors and gover-

nors and a host of organizations and was capped by a centennial dinner in Washington addressed by the President of the United States.

Across the land the role of schools in the life of the community has been a focus for attention of lay and educator citizens at centennial forums, historical pageants, and exhibits at country fairs, while seminars on the relationship of education to such problems as automation, world understanding, and the impact of technology upon aesthetic and moral values are being held on a series of college campuses.

Still other centennial-year projects have centered on increasing understanding of the teaching profession, among them *NEA: The First Hundred Years* written by Edgar B. Wesley, Visiting Professor of Education at Stanford University, and published by Harper & Brothers. A stream of printed materials has carried information about the centennial program far and wide. More than a million pieces of literature, for instance, were produced at NEA headquarters in addition to the 96-page March centennial issue of the *NEA Journal*.

To honor the teachers of America, the United States Post Office issued a commemorative 3 cent stamp during NEA's centennial convention. In his address to delegates there, L. Rohe Walter, Special Assistant to the Postmaster General, said that a first printing of one hundred and twenty million had been authorized, commenting that "as they are used these stamps will remind untold thousands of our citizens of the over-all greatness and goodness of our educational system—its aims, its purposes and its needs."

That NEA's centennial has built support for the profession—both inside and out—was emphasized in a summing up by Helen Ryan, Field Representative of the Illinois Education Association and Chairman of NEA's Centennial Celebration Commission, who stated: "It has brought us all a bit closer together—as teachers, but also as citizens. The program has uncovered a resource of willingness to serve and ability to co-operate that we must use to serve our schools even better in the century ahead."

### Goals for the Years Ahead

While paying homage to the achievements of the past was a salient part of many centennial activities, as NEA with a membership of over 700,000 teachers and administrators considered its second century during the 1957 convention at Philadelphia, the attention of the gathering was



The 1957 NEA Centennial Convention included a symposium of a Joint Committee of NEA and the National School Boards Association on the topic "Co-operating to Establish Better School Personnel Policy." Speaking on various phases of the subject were, from left to right, William A. Shannon, executive director, N.S.B.A.; Everett N. Luce, N.S.B.A. president; Mrs. Buena Stolberg, Webster Groves, Mo., teacher; John Lester Buford, Mount Vernon, Ill., superintendent; Mrs. Fred A. Radke, N.S.B.A. board of directors; D. Richard Wynn, Teachers College, Columbia.

chiefly focused on what should be the guide lines for the future.

In a keynote address William G. Carr, NEA's executive secretary, predicted that "in the next 20 years there will be in American education one many-sided change . . . (whose) outstanding characteristic may be summarized as a subtle but very important new emphasis on *quality*." As quantity was the primary goal for the first century so will quality be our chief aim for the second, he stressed.

Naming some of the factors requisite to excellence of instruction he said: "First, the most urgent change for the immediate future is *more time for teachers to help individual children*. Quality in education requires smaller classes and more classrooms. Crowded schools and half-day sessions today increase the nervous tensions of teachers and students and aggravate discipline problems. These conditions lower the standard of achievements, limit the adaptation of instruction to individual differences, and, to complete the vicious circle, hamper the recruitment of needed additional teachers. These conditions must and will be remedied in the next 20 years, not that teachers may lead an easy life, but rather that teachers may devote their energies more fully to their most essential tasks."

An increase in dues from \$5 to \$10 per year was adopted during the convention by a four to one vote of the more than 6000 delegates present so as to make possible an expanded program of services and leadership, including increased activity in the field of federal relations and legislation, an extended public relations program, and strengthened field services to affiliated associations.

In other action the delegates adopted a series of resolutions aimed at advancing the standards of the teaching profession. Through its Representative Assembly, the National Education Association, for example, went on record in favor of teachers being more active participants in government, supported the minimum requirement of a bachelor's degree for beginning teachers, advocated raising salary goals to a range of from \$4,800 to \$11,500. The use of subjective methods of judging the quality of teaching performance in setting teachers salaries was opposed vigorously.

### Key Concerns

Problems of concern to education today were discussed at concurrent sessions and department and committee meetings held during the conference, many of which were devoted to matters affecting teachers taking up such issues as teacher recruitment, the status of teachers in a free society, professional training and upgrading, and personnel policies that encourage professional performance.

How to improve the quality of education was a thread running through many of the discussions which brought out again and again that to have good schools good teachers are essential.

### Obtaining Top-Notch Personnel

"A Quality Teacher in Every Classroom" was the slogan of a newly-appointed Joint

Committee of the NEA and the National School Boards Association which held a symposium on "Co-operating to Establish Better School Personnel Policy" at the convention.

Describing the selection of the faculty as the most important single function of administration and one that merits more careful consideration than typically obtains, Richard Wynn, associate professor of education at Teachers College, Columbia University, in his presentation to the group observed "most school systems spend less than \$25 in time and materials in making the \$28,000 investment hiring a new teacher represents (assuming a teacher remains in a given position for seven years on the average and receives an annual salary of about \$4,000)."

"Few industries would make a choice of such large consequence as haphazardly as most school systems do," he continued, suggesting that a good policy on teacher selection be based on the following considerations:

*First*, it is the function of the board of education to establish the selection policy and procedure but the function of the chief administrative officer and his staff to execute the policy procedures.

*Second*, faculty should be selected solely on the basis of professional merit without regard to whether or not the candidate is a local resident, married or not, and without regard to his religion, politics, race, or national background (but) considering such demonstrably valid qualifications as professional training, experience, interest and understanding of children, personal adjustment and security, breadth of knowledge, and culture.

*Third*, good selection depends in large measure upon effective recruitment over a broad geographic area. Better candidates can be selected when school systems conduct a deliberate search for good teachers rather than depending upon self-recruited candidates entirely. . . . This means maintaining good relations with many widely distributed placement offices rather than with one or two local ones. Many school systems send a member of their staff to teacher training institutions to interview and frequently to observe the candidate's teaching on campus.

*Fourth*, good selection depends upon gathering as much data as possible about candidates, utilizing a number of selection processes, and involving a number of persons in the selection. There is a lot to be said for using a committee in the selection of teachers. This committee might very well consist of the superintendent of schools, a supervisor of the subject or grade in which the candidate will teach, a classroom teacher in the same subject or grade, the school psychologist, and certainly the principal of the school in which the teacher will teach.

### Written Personnel Policies

An important ingredient in keeping competent teachers—written personnel policies for the teaching staff—was discussed at one of the section meetings where a dramatization of a board of education acting upon personnel problems without written policies pointed up the advantages of having them instead of improvising in each case.

That there are many difficult situations in which school boards find themselves when they don't work under a good set of written policies was confirmed by Everett

N. Luce, president of the National School Boards Association. He cited his organization's belief that "in the making of policies, wisdom would indicate that individuals and groups who will be affected by a given policy should be consulted by the board of education during the formulative period and should be fully informed concerning the policy finally adopted."

A superintendent's viewpoint was expressed by William R. Stover, superintendent of the Central Regional High School of Bayville, New Jersey, another panel member, who held that one of the benefits of written personnel policies is their influence on better morale of all members of the staff which pays off in service to students. He also praised this procedure as having "a practical pay-off in not only getting and keeping competent teachers but in avoiding salary hassles and airing dirty linen to citizens."

### Other Considerations

Still other aspects of the problem were discussed at a section meeting considering "What Can the Profession Do to Provide an Adequate Supply of Qualified Teachers?" Here the main talk given by Ray C. Maul, assistant director of NEA's Research Division, called attention to steps frequently mentioned in professional literature:

1. Topping all lists of recruitment efforts is the demand for more adequate compensation—higher salaries. Perhaps our most persistent task is to keep before the public the fact that the quality of educational service in their local schools is dictated by the salary structure; that in today's keen competition for trained man power the schools cannot expect to buy more than they are willing to pay for.

2. Extend the prestige of teaching. This plan has two distinct facets: The attitude of teachers toward their work, as it is observed from day to day by impressionable students, and the attitude of the public, as indicated by public recognition of teachers.

3. Encourage a larger per cent of high school graduates to enter college. Here we seek to enlarge the total number of college-educated persons, in the confidence that teaching will profit along with the other occupations in competition for these coveted persons.

4. Strengthen the counseling program at all levels, with particular emphasis upon the late high school and early college years in the belief that many vital decisions (and changes in occupational choices) are made here.

5. Inaugurate a campaign to see that both counselors and teachers (again particularly at the late high school and early college years) are familiar with, and know how to interpret the up-to-date statistics on teacher supply and demand.

6. Follow up, the first year after their graduation, all those students who took liberal arts programs without the required preparation for the teaching certificate. Here is an almost completely blank spot in our follow-up studies. We know, in general, that many liberal arts undergraduate programs are not specifically oriented toward any occupation. And we know, also in a general way, that many of these persons ultimately gravitate into post-graduate courses of various sorts in a hurry-up effort to qualify for the teaching certificate. But our efforts to follow them after they receive the bachelor's degree show little or no systematic planning. Many colleges have been woefully indifferent to what happens, vocationally, to their graduates.



# THE AMERICAN School Board Journal

An Independent Periodical of School Administration  
William C. Bruce, Editor

## FEDERAL AID IN 1958?

THE failure of Congress to pass the school construction aid bill by 208 to 203 represents a setback to the movement for providing an adequate school plant for all children within the next five years. As in 1956, the bill was virtually destroyed by the anti-segregationist amendment, which would have forbidden federal aid to school districts that had not complied with the Supreme Court ruling.

It would be interesting to know to what extent the action of Congress was influenced by the magnificent progress made by local school districts in voting and selling bonds, and thus frankly accepting for the local communities the burden of school plant construction. During the first six months of 1957, bonds were sold in the amount of \$1.3 billion, which according to the Investment Bankers' Association, is an all-time first half record.

With due hope in President Eisenhower's avowed intention to offer a new federal-aid bill in 1958, it seems to us that the school boards have only one avenue of action open to them. In spite of high interest rates for which federal monetary policies are responsible, growing difficulties due to ever rising construction costs, and local opposition to higher school taxes, the local school construction programs must be pushed vigorously and steadily wherever a deficit of classrooms is expected. Children cannot wait. There should be no shortages by 1961 even in the five least favored states.

## FOR BETTER FINANCIAL COMPARISONS

THE new handbook of "Financial Accounting for Local and State School Systems" is the second document issued by the U. S. Office of Education in 1957 for which the staff of the Office deserves the highest commendation.

The Handbook which is based on earlier works in the same field, and which has had the closest scrutiny as well as direct help from several hundred experts in the five major national organizations of school officials, sets a new standard for the uniform and accurate recording of public school financial transactions. Its use will make state and local reports of income and outlay, of per capita figures, and of trends truly significant and comparable. As the Handbook suggests, its universal use will help insure "appropriate initial recording of financial data . . . improve school budgeting, and establish a sound basis for cost accounting."

Future inaccuracies in school accounting will be due, not to a lack of uniform definitions for classifying accounts, but to differences in state laws and prescribed accounting procedures, and to the carelessness or incompetence of local school accountants. School boards have a real duty to perform in insisting that their school-business executives master the technical details of the "Handbook" and put them into prompt use. State school boards associations should ascertain from the state departments to what extent state laws cause differences in required state practice. Complete conformity in all states is heartily recommended.

## ARE OUR SCHOOLS TOO "THIN SKINNED?"

ON PAGE 45 of your JOURNAL this month, Dr. William B. Levenson of Cleveland, a well-known authority on school public relations, suggests that the schools today can hardly afford to be too "thin skinned" about criticism. Dr. Levenson reminds us that the schools belong to the people and the people have a right, as well as a corresponding responsibility, to "criticize constructively."

In current controversies about public school operation and classroom construction costs, about the school's part in our shortages of trained scientists, about basic curriculum "deficiencies," etc., charges are frequently leveled against the public schools in popular magazine articles and major speeches on the national level and by newspaper editorials and taxpayer groups on the local level. In many cases, the charges are obviously erroneous; in other cases, some phases of the charges may stand investigation. The mistake on the part of the schools is to "get panicky," to regard criticism of the schools as distortion because it is criticism, to condemn critics of the schools as enemies of the schools. In our era of dire need for more community support, it seems rather shortsighted to reply to critics—no matter how far off the target or insincere their criticism seems to be—with a naive rebuttal that no phase of school policy or operation could stand improvement.

In this important phase of public relations, the school board, which welcomes community criticism by insisting that charges are investigated and are followed up with appropriate action and public statements, has taken a gigantic stride toward retaining and improving the interest of citizens in their schools and toward developing to the fullest the best type of school-community understanding.

## A BOARD RESPONSIBILITY

THE New York City board of education has resisted invitations and demands for the appointment of a committee of citizens and/or experts to screen all applicants for the superintendency of the New York City schools, and to recommend several outstanding candidates for appointment.

Before Dr. Jansen was elected in 1946, the board appointed an advisory committee, and then rejected its recommendations, not without some embarrassment on both sides. Dr. Jansen, who will retire in 1958, made such an immediate personal success of his work that the resentment of the recommending groups soon vanished.

It is trite to say that the selection of a superintendent of schools is the most important job which a board has to undertake. It cannot, even in the matter of screening candidates, abdicate its responsibility. The New York City board has gone as far as it can—legally and practically. It has asked all groups interested to submit suitable names and to back their choices with full professional and personal facts. Beyond this point the board should not go unless it wishes to admit that it is not willing to meet its legal responsibilities.

## PAY FOR SUPERIOR SERVICE

AN NEA research study indicates that 158 school districts—large, medium, and small—specify or authorize a superior service maximum pay for teachers. These plans for recognizing outstanding teaching services are comparatively recent and each year adds to the total of interested districts. There are numerous difficulties in the way of recognizing superior professional work of teachers. The progress recorded suggests the need of studying and accepting more widely the success features of the plans.



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# The Argument for a Unit Executive Plan of Organization

C. P. HOOKER

Associate Professor of Education, University of Pittsburgh

For several decades most authorities in school administration and business administration have proclaimed the advantages of the unit executive plan over a dual or multiple executive plan. Their recommendations are practiced almost universally in the management of business enterprises, and educational institutions have adopted the practice in large numbers. A special study<sup>1</sup> of the status of the unit and multiple plans in 331 city school systems showed that the single executive plan was followed in 251 cities, 75.8 per cent. This is an impressive majority favoring the single executive plan. If it is a clearly superior type of organizational structure, why is it not practiced in the other 24.2 per cent of the districts?

There is some evidence that the laws of some states have an influence on the internal organization for education at the level of the local district. However, every state that reported having school districts with dual executive plans also reported having districts with unit executive plans. The Commonwealth of Pennsylvania is a case in point. Thirteen of the 14 districts reporting from Pennsylvania indicated a dual or multiple executive plan of organization. The law in Pennsylvania reads, "The secretary of the board of school directors shall perform the following duties: . . . He shall have general supervision of all the business affairs of the school district, subject to the instructions and directions of the board of school directors. . . ."<sup>2</sup>

This statute has been interpreted by many boards of school directors to mandate a dual administrative structure. Others have recognized that the board of school directors can delegate this supervision of the secretary of the board to the superintendent of schools in the same fashion that many other items, for which the board is responsible, have been delegated to the chief administrative officer. Hence, one must look beyond the statutes of the state to determine why dual executive plans prevail in so many school districts.

It occurred to the writer that perhaps the authorities in school administration and business administration have over-emphasized the superiority of the unit executive plan of administration. Could

it be that superintendents in districts having dual executive plans think they are the best type of organizational structure? Superintendents in school districts, with populations of 30,000 to 500,000 in Pennsylvania having dual executive plans, were asked by the writer to react to questions concerning the operation of their organization. The following conclusions can be drawn from their replies:

1. In schools operating with dual plans, the co-ordination of the school affairs must lie in the board of school directors. Since school boards normally meet once a month, this arrangement cannot be completely successful. Many problems must be dealt with promptly and cannot wait for a meeting of the school board. Furthermore,

whenever the school board attempts to effect co-ordination, it must be concerned with the details of school affairs and thus have less time for larger considerations.

2. Negotiation and compromise are the price of co-ordination if co-ordination is made the responsibility of the several executives rather than the school board. This situation is bearable if both executives are willing to make concessions, but it does not always produce the best results. Certain principles should not be compromised just for the sake of harmony.

3. The desirability of maintaining harmonious relationships restricts the most effective performance of both executives. For instance, the business manager is less inclined to question the wisdom of a requisition for "educational" materials than if he were responsible to the superintendent. If the business manager were part of the superintendent's team, such supervision of procurement could be exercised with less concern about future relationships, since it would not be considered an encroachment into the "educational" field.

This limited study cannot be cited as final proof of the superiority of one type of organization structure over another. Perhaps it presents some new arguments for the unit executive plan. It does seem quite clear that school administrators in large school districts in Pennsylvania would welcome school board action to eliminate the dual executive organizational structure.

## SCHOOL LAW

### School Board Discretionary Powers and the Public Will

STEPHEN F. ROACH

Editor, *Eastern School Law Review*,  
Jersey City, N. J.

In legal theory a local school board is an agent of the state, charged with carrying out the state's responsibility for public education as that duty is deemed to apply to the local community wherein the board is situated.

However, practical experience, as well as legal theory, has demonstrated that, for maximum efficiency of operation within this organizational framework, a local board must necessarily be allowed considerable discretionary authority.

It is this resulting dual responsibility—legally to the state, but practically to the residents of the school district—that occasionally causes misunderstandings between board members and district residents. Most frequently, lack of agreement arises when a course of action as proposed by the board is at variance with the desires of individual (or groups of) district residents.

#### Facts of the Case

An interesting case<sup>1</sup> involving this aspect of board operations was settled recently in the Supreme Court of Alabama.

Phillips, the superintendent of schools of Blount County, Ala., together with some thirty-odd resident taxpayers and patrons of that county's school system, brought suit to enjoin the members of the county school board (and the state superintendent of education) from proceeding with the establishment of a senior high school at Appalachian, a community in Blount County.

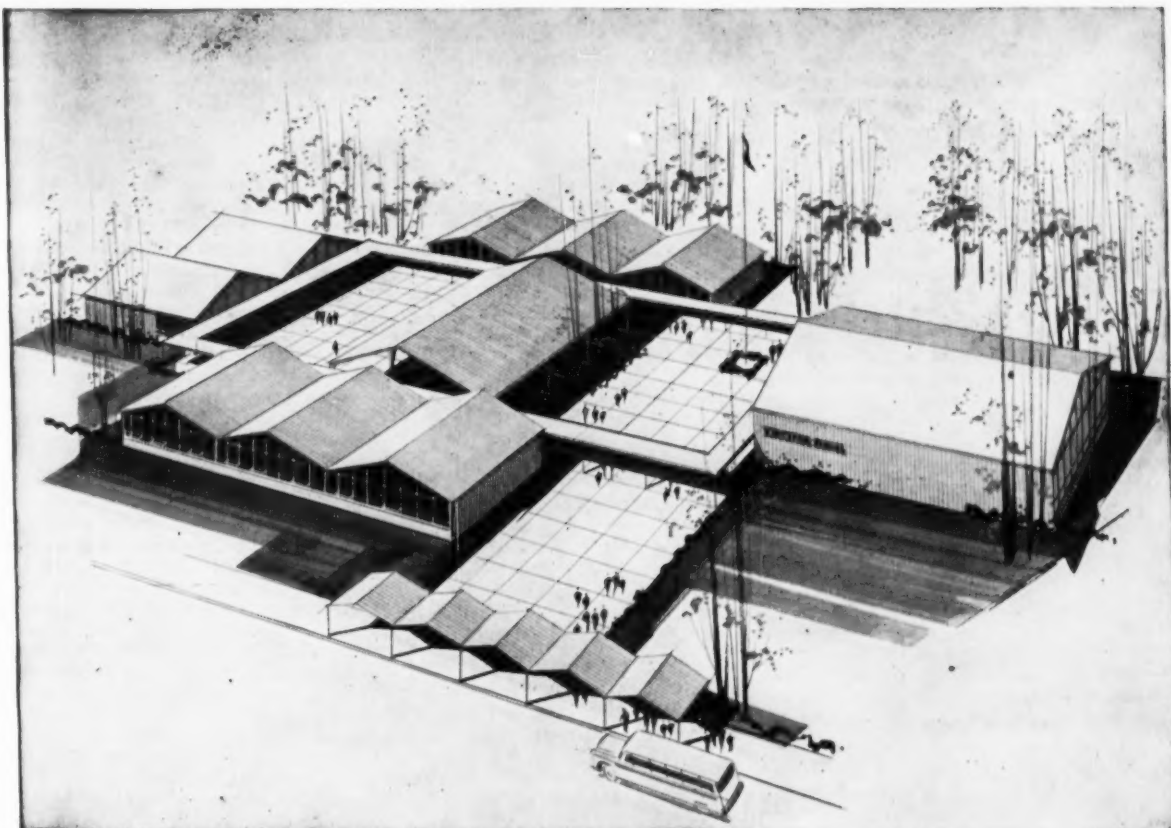
The bases for the suit rested on the charge that the members of the county board had abused their discretionary powers in authorizing the establishment of the school, and in advertising for bids for the sale of school warrants to cover the establishment costs. The charged abuse of discretion was based, essentially, on the following allegations: (1) The population of the Appalachian area was not sufficient to warrant a senior high school. (2) The money required to establish the proposed school could better be spent in other ways,

<sup>1</sup>Board of Education of Blount County et al. v. C. B. Phillips, et al.; cited as 89 So. 2d 96 (Ala.) (1956) in the *West National Reporter System*.

(Continued on page 70)

<sup>1</sup>American Association of School Administrators and Research Division of the National Education Association, "Status of Unit and Multiple Executive Plans in 331 City School Systems in Cities 30,000 and over in Population"—*Education Research Service Circular*, No. 6 (Washington, D. C., 1951).

<sup>2</sup>Section 433, *School Laws of Pennsylvania*, 1953.



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E

## SCHOOL LAW

(Concluded from page 68)

if at all. (3) The more varied curriculum and extracurricular activities already available (at the separate city high school in Oneota) would make it more beneficial to the students to attend that school rather than the (admittedly smaller) proposed one. (4) The physical equipment that would be made available as well as the geographic conditions of the area, would make Appalachian an unsuitable site for a senior high school.

An additional charge of abuse of the board's discretionary powers was also made on the ground that the board, in authorizing the new school, had acted without the

recommendation of the county superintendent.

A lower court judgment was rendered against the county board. This decision was now appealed.

### Issues of the Case

The basic issue in this case involved the question whether the action of the Blount County board constituted an abuse of its discretionary powers.

Of more fundamental significance, however, would be the views of the court as to the legal relationships, if any, between the determination of a local school board (in a matter relating to its discretionary authority) and the desires of district residents.

### Findings of the Court

In its opinion, the court first pointed out that it was within the discretion of the county board to determine the need for and location of schools within the county. Only in the presence of "fraud or bad faith or gross abuse of discretion" would the courts interfere — and thus substitute their judgment for the judgment of the board.

"Courts will not hear proofs," the opinion continued, "and attempt to determine whether the discretion is wisely exercised or not. Where the law casts both a right and a duty upon an officer which involves exercise of discretion . . . (interference by the courts with) the officer's conduct with respect to his duty or discretion . . . would be to interfere with the ordinary functions of government."

"Courts cannot legislate," it went on, "or invade the province of the other departments of government in matters of policy." This principle would prevail, the court emphasized, even though in the exercise of discretion "there may have been error or bad judgment."

The present court did not attempt to define precisely the term "gross abuse of discretion" — feeling rather that it was best "to allow the facts and circumstances peculiar to each case to determine its presence or absence." However, the court did suggest that such acts must be shown to have been: (1) exercised "on grounds or for reasons clearly untenable, or to an extent clearly unreasonable"; and (2) so arbitrary and unreasonable "as to shock the sense of justice and indicate lack of fair and careful consideration."

In further discussing the facts that would be necessary to present a case of gross abuse of discretion, the court noted that any cited board action would be presumed to have been taken only after the board had: (1) considered the public welfare, and (2) made its determination through "the exercise of intelligent judgment" in connection with the public interest.

"The burden of showing to the contrary, when the action of a school board is challenged with respect to matters committed to its discretion, is a heavy one. . . . Discretion involves the exercise of judgment incidental to the proper performance of the duty delegated."

The opinion then added, significantly: "When the contention is that the proposed action is unwise, no matter by what consensus of opinion this is shown, the law will refer it to mistaken judgment over which it has no supervision. But . . . if the facts admit of no other conclusion than that the determination of the board has been influenced by other considerations than the public interests . . . the law will regard it as an abuse of power, a disregard of duty, and it becomes the duty of the courts to interfere for the protection of the public."

Turning then to the present case, the court held that there had been shown no facts to indicate that the board was motivated by any consideration other than the public interest or that it had failed to consider all the arguments which Phillips

(Concluded on page 74)

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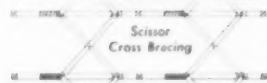
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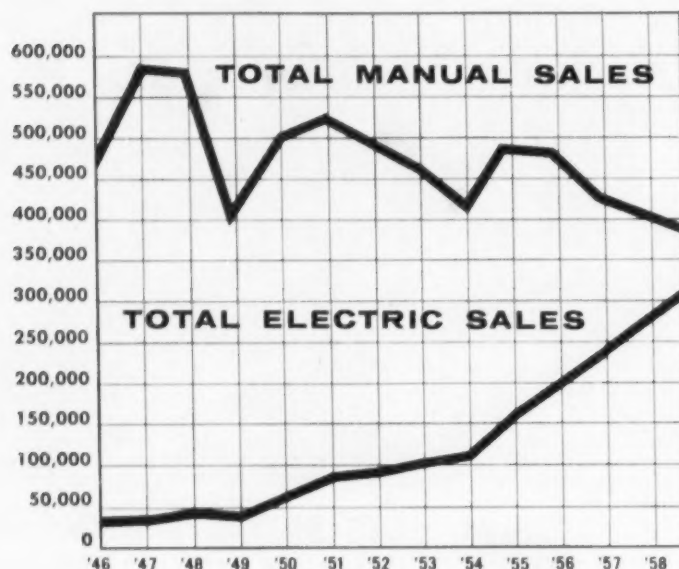
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## SCHOOL LAW

(Concluded from page 70)

(and the others) had urged against the proposed action. "It is aparent that in making a determination on each of these considerations there is ample room for reasonable differences of opinion, and there is nothing . . . to indicate that the County Board of Education did anything other than to adopt the solution which in their judgment was proper. As pointed out . . . the court will not attempt to determine whether the board's action was wise or unwise. The fact that others may consider the board's judgment was not to the best interests of the district affords no grounds for relief."

To the contention that the board's action had been improper in that it had been taken without the recommendation or approval of the county superintendent, the court pointed out that this lack of agreement was of no valid significance since the decision of the state superintendent—in this case, approving the board action—was binding on both the county superintendent and the county board.

Concluding that no case of a "gross abuse of discretion" had been presented, the Supreme Court reversed the lower court decision, and upheld the action of the school board.

### Significance of the Case

The following legal principles were of significance in this case:

First: A local school board possesses the discretionary authority to determine the need for and location of the district schools.

Second: Only in the case of demonstrated fraud, bad faith, or gross abuse will the courts interfere with a board's exercise of its discretionary powers.

Third: This principle of judicial noninterference will prevail even though, in the exercise of a school board's discretionary authority, there may be error or bad judgment.

Fourth: Unless shown to the contrary, a board's exercise of its discretionary powers will be presumed to have been made only after an intelligent consideration of the public interest.

Fifth: A "gross abuse" may exist where it is shown that a board's exercise of its discretionary authority was carried out on clearly untenable grounds (or to a clearly unreasonable extent) or was so arbitrary and unreasonable as to shock the sense of justice and indicate lack of fair and careful consideration.

### Teacher Tenure

The purpose of teacher tenure laws is stated in a recent Pennsylvania decision as follows: The purpose of the tenure provisions are the maintenance of an adequate and competent teaching staff, free from political or arbitrary interference, whereby competent teachers may more efficiently perform their duties of instruction.—In the case of *Small v. Darby Twp.*, 130 Atlantic reporter 2d 661, Pa.

Teachers and other professional school employees are not officers, but employees of school districts. This is true in spite of the fact that they hold tenure under the school code.—*Small v. School Dist. of Darby Twp.*, 130 Atlantic reporter 2d 661, Pa.

Under the Pennsylvania laws, the supervising principal of a school district is a professional employee, protected by the tenure provisions of the school code.—*Small v. School Dist. of Darby Twp.*, 130 Atlantic reporter 2d 661, Pa.





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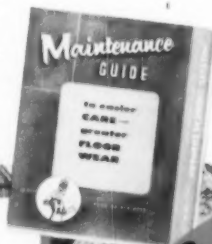
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Westfield, N. J., is a town where many children who attend elementary schools and the junior high school ride their bicycles to school. Back in fall of 1954, Hillis M. Partington, principal of Lincoln Elementary School, decided that pupils of his school would benefit from instruction in how to ride bicycles in a safe manner. The teachers enthusiastically approved the idea and an experimental course was developed.

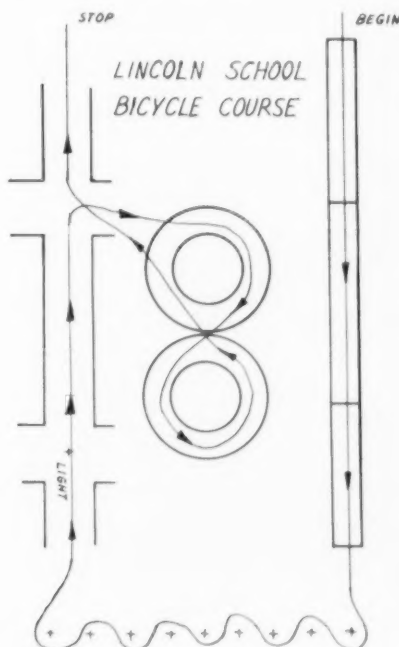
Patterned after the procedure followed in order to secure a motor vehicle drivers' license in New Jersey, the plan required pupils to pass a written examination and a road test to demonstrate proper riding techniques over a bicycle riding course.

To prepare for the written examination, pupils were first given classroom instruction in the "Rules of the Road." These were simple directions to be followed in riding a bicycle.

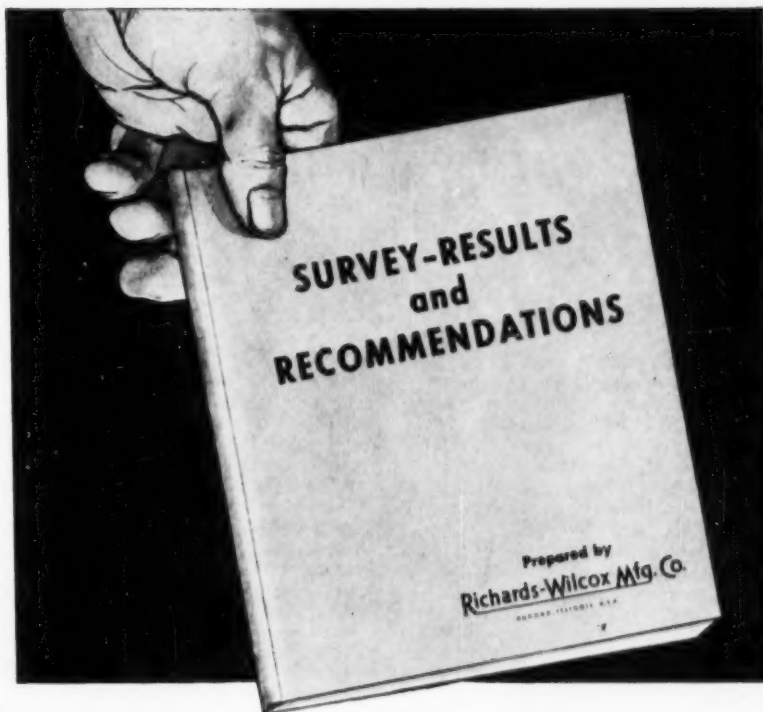
A riding course for the road test was laid out in white lines on the hard surface of the playground. Pupils, under the supervision of their teacher, inspected the course, walked through it, then practiced with their bicycles. As a preliminary measure, all bicycles had to pass a safety inspection.

All pupils who successfully passed the tests were given certifying cards in the school assembly, as a final emphasis for the course.

The course has proved quite successful and it has been extended to other elementary schools during the past year.



SCHOOL BOARD JOURNAL for SEPTEMBER, 1957

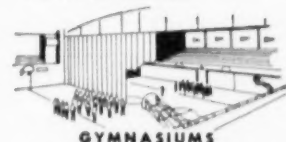


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## AUDIO-VISUAL EDUCATION

# Developing Your Audio-Visual Program

JOHN MOLDSTAD

Assistant, Research and Utilization, Audio-Visual Center  
Indiana University, Bloomington

Within the past ten years audio-visual materials have evolved from supplementary or enrichment aids to their proper position as basic teaching materials. While today the printed word is still the principal medium of instruction, most teachers and administrators have come to appreciate the fundamental role audio-visual materials can play in good instruction. They realize that these relatively new tools can make a unique contribution and in certain cases have proved more effective in developing specific attitudes and concepts than anything available in printed form. A nationwide study recently reported by the Research Division of the National Education Association\*\* revealed that 35 per cent of all elementary teachers in all urban school districts reporting used motion pictures at least once a week, 35 per cent used them every two or three weeks, 19 per cent used them two or three times a year, and 11 per cent never used them.

Although these results are encouraging, there are still numerous school systems in the United States which have only a token audio-visual program. The administrators may have provided a motion picture projector and appropriated money for securing a few films — mostly sponsored — but frequently have made no attempt to broaden the scope of their program. Perhaps this is because they have no conception of what services and assistance an effective audio-visual program could and should be providing or they lack concrete ideas of how to provide for and finance

such a program. The suggestions appearing in this article are offered with the hope that they might assist those who have arrived at that stage of self-analysis where they realize their school building audio-visual program is not all it could be.

What types of services do administrators and teachers have a right to expect from a good audio-visual program? Under the leadership of an audio-visual building co-ordinator who has the personality, professional training, and experience for the position and who is given a reasonable amount of time for performing his job, these three types of services might be expected:

1. Assistance for teachers in the selection, utilization, and facilitation of a wealth of commercially-prepared, audio-visual materials and equipment.

2. Help for teachers in the preparation of teaching materials not available commercially.

3. Aid for administrators and teachers in the production of mass media materials for interpreting the school's program to the community.

### Selection of Materials

A major responsibility of the audio-visual co-ordinator is to assist teachers in locating and selecting all types of audio-visual materials which can help them do a better job. This involves seeing that the many source books of these materials are readily available; securing film guides and facilitating the preview of materials under consideration; helping the teachers and administrators develop a policy concerning

the purchase, rental, and free loan of materials; and, finally, encouraging teachers to develop some permanent record of their evaluations for future use by themselves and by other teachers in their building. The Sherman Evaluation Profile<sup>1</sup> and the form developed by the Educational Film Library Association<sup>2</sup> might prove useful either in their original form or with modifications to satisfy local needs. One copy of each evaluation might be retained by the evaluating teacher and a second filed either in the co-ordinator's office or the school library.

### Utilization of Materials

The majority of teachers in today's classrooms have had little or no instruction in either efficient utilization of audio-visual materials or operation of the equipment needed to present these materials. Thus, they often don't quite feel up to tackling this new experience in teaching.

Another responsibility of the audio-visual co-ordinator is the development of a good in-service training program. He should arrange for and/or personally conduct workshops concerned with various techniques for effectively using audio-visual materials and equipment. Demonstrations showing materials being used in actual classroom situations should be provided by the co-ordinator, or preferably by one of the members of the school. Such demonstrations might be given during regular faculty meetings or at special departmental meetings. Encouragement should be given to teachers to experiment with new ways

(Continued on page 80)



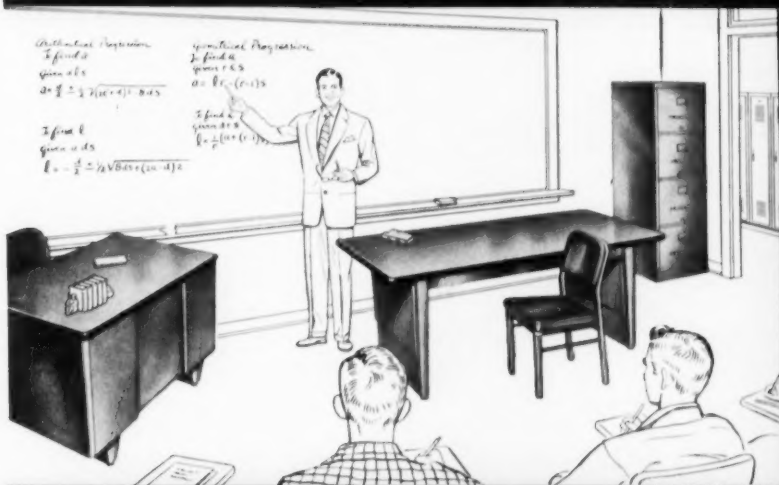
A teacher (left) prepared materials for copying from facilities and supplies provided in the graphic arts workroom; she (right) then utilizes it in the form of a 2 by 2-inch slides for her first graders.



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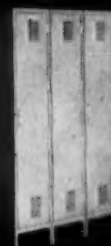
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## AUDIO-VISUAL

(Continued from page 78)

of utilizing these materials. Above all, individual instruction should be given in equipment operation. Teachers need opportunities to acquire confidence in the mechanical aspects of using these aids. Even if the school co-ordinator provides student operators to do the actual classroom projection, the teacher will be more inclined to use the materials when she knows that, if the student runs into projection difficulties, she is capable of coming to the rescue.

The in-service training program must be a continuous activity if the teachers are to keep abreast of new equipment and material developments.

### Administrating the Program

Teachers are extremely busy people. They tend to use audio-visual materials if and when they are easily accessible. When a teacher decides a film or filmstrip might best accomplish her teaching objective, she should be able to make arrangements for its preview and classroom use with a minimum of effort. This condition frequently exists only when the co-ordinator has utilized good administrative practices in obtaining clerical and student assistance with many of the necessary, but routine, jobs connected with the distribution of these materials. Student projection clubs are often the answer. Frequently, the shorthand and typing classes can profitably handle the correspondence tasks

—particularly the letters requesting rental films.

Co-operatively, the A-V co-ordinator and teachers from each grade should agree upon approximate grade placement of the various materials — particularly specific films — so that students don't see the same ones year after year. Or worse, in subject after subject!

Successful utilization implies adequate physical facilities for showing projected materials. Results of the afore-mentioned National Education Association study show that classrooms acoustically treated and capable of being darkened are the exception rather than the rule. When audio-visual educators were polled concerning their opinion on how well their schools' classrooms were adapted for the use of audio-visual materials, they reported only 25 per cent of the elementary and secondary classrooms "well adapted" with the remaining rooms either "poorly adapted" or "not adapted."

A well-trained co-ordinator can supply information, advice, and assistance in renovating existing classrooms or planning new rooms for effective use of audio-visual materials. Two recent Department of Audio-Visual Instruction publications<sup>2,3</sup> contain many practical suggestions related to these problems.

### Minimum Equipment Suggestions

How much and what types of audio-visual equipment? This question, faced by all administrators at some time in the development of their audio-visual program,

certainly has no pat answer. Ultimate decisions on equipment purchases should be based on the needs and desires of the teachers who are going to use them. The Audio-Visual Commission on Public Information, composed of members of eight major national educational and audio-visual industrial groups, devoted considerable time and energy to this problem. Recently they proposed the following listing of minimum equipment requirements for a school audio-visual program (as listed in the September, 1956, SCHOOL BOARD JOURNAL):

#### 16mm. sound projectors

1 per 300 students or major fraction thereof; at least one for each building

#### Filmstrip and 2 by 2-inch projector

1 per 200 students or major fraction; at least one per building

#### Opaque projector

1 per building

#### Record players (3-speed)

1 per kindergarten or in room where child receives his first school experiences

1 per five other classrooms; at least two per building

#### Tape recorders

1 per 300 students or major fraction; at least one per building

#### Radio receivers (AM-FM)

1 per five classrooms; at least two per building, where appropriate programs are available

1 per building, where appropriate programs are available

#### Overhead projector (7 by 7-inch or larger)

1 per building

#### Screens (square; 60 by 60-inch or larger)

1 per each two classrooms

(Concluded on page 82)

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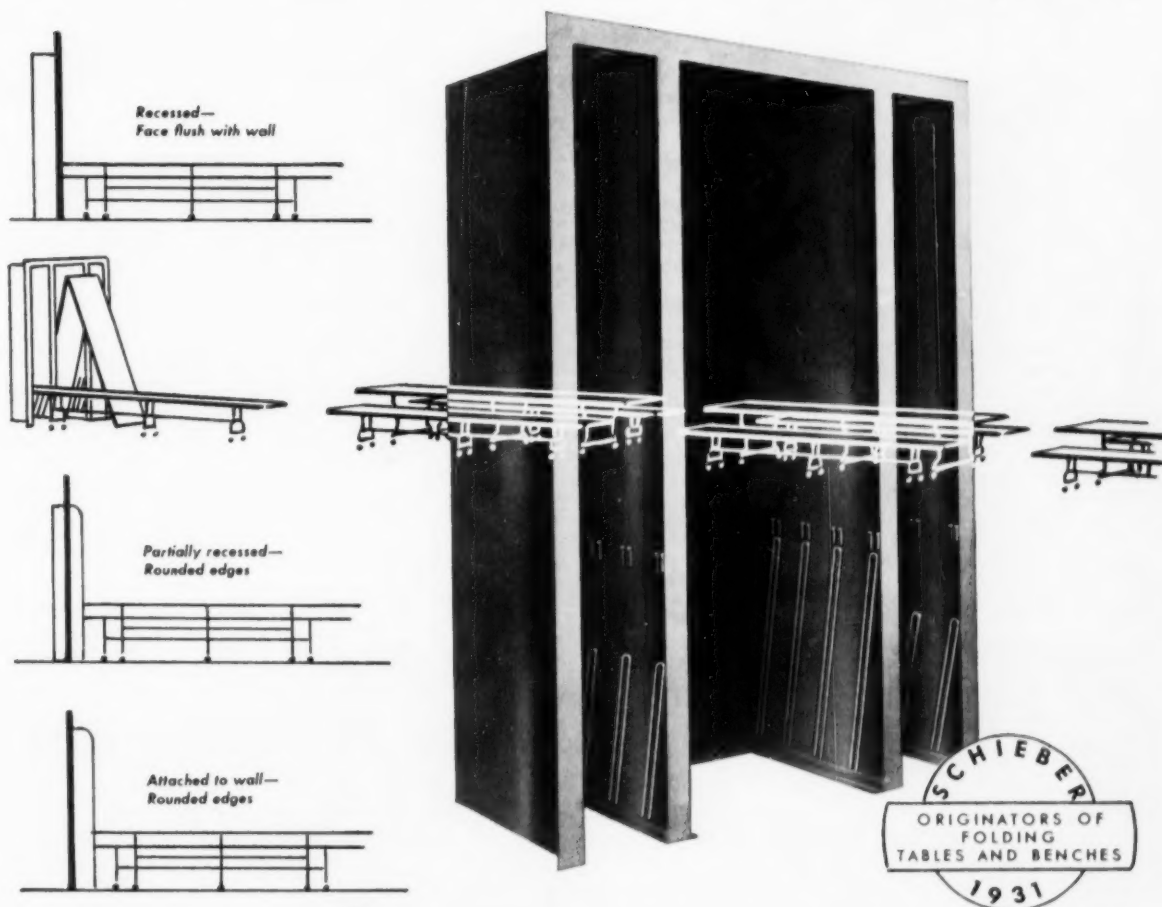
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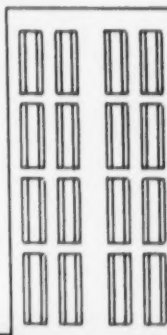


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## AUDIO-VISUAL

(Concluded from page 80)

(Either the opaque projector or the overhead projector should be capable of projecting  $3\frac{1}{4}$  by 4 inch slides.)<sup>1</sup>

Since 1950 the increased production of commercial films in almost every academic area has been most heartening. Today teachers frequently have the problem of selecting from among several films on a topic rather than just finding a film generally related to the subject under consideration. However, this ever increasing supply of new educational films and other commercially produced materials will never satisfy all teacher needs.

Often, the teacher requires specific teaching materials which can be prepared only locally. She may need a series of mounted pictures of animals for a bulletin board; a slide of a musical score for use by the band; a flannel board and materials to show the molecular structure of a chemical compound; or still or motion pictures needed to document the school's annual assembly program.

These materials, both projected and nonprojected, can and are being successfully produced in many schools.

Usually schools which have experienced marked success in this area of local preparation have provided: (1) a graphic arts room equipped with needed raw materials and equipment such as dry mount presses, paper cutters, photographic equipment, etc.; and (2) an audio-visual co-ordinator who has the experience and know-how to guide teachers in preparing

the teaching materials they need.

Too frequently, administrators have been negligent in interpreting the work of the schools to the community and informing citizens of goals, problems, and needs. What communication is attempted often fails because of a lack of simple, eye-catching charts, graphs, and pictures which can attract and inform the local citizenry.

The audio-visual co-ordinator, adequately trained in the techniques of simple production, can greatly help the administrators get their story to the public. Under his direction, pictures can be provided for display in store windows or for publication in local newspapers or public relations pamphlets. Working co-operatively with administrators or teachers, the co-ordinator can also help in the preparation of colored slides and transparencies for use on television or for illustrated lectures.

### Adequate Financing

The school building audio-visual program can be an indispensable force in upgrading teaching and informing the public about the school and its role in the community. It can be if properly trained leaders are secured and given time to do the job and if the audio-visual program receives the necessary financial backing.

And what is adequate financial support? The Audio-Visual Commission on Public Information believes that the minimum cost of the local school program should be one per cent of the school's instructional budget; used to provide all materials of instruction except textbooks; and exclusive of all salaries. Thus, if the annual per pupil cost for instruction was

\$250, an annual expenditure of \$2.50 per student would enable that school to provide for its students the advantages of a whole gamut of new and dynamic teaching materials, both commercially produced and teacher-made to fit local instructional needs and to interpret the educational program of the school.

In education, as in other areas, one gets just what he pays for. Can we afford not to develop and finance a good school building audio-visual program?

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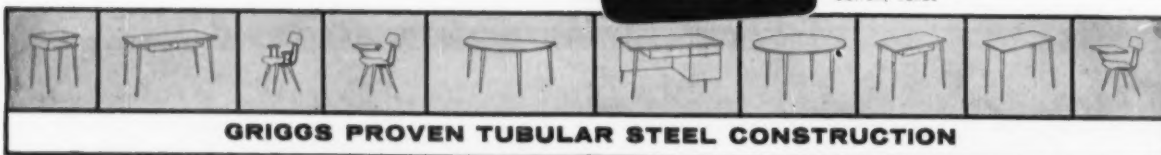
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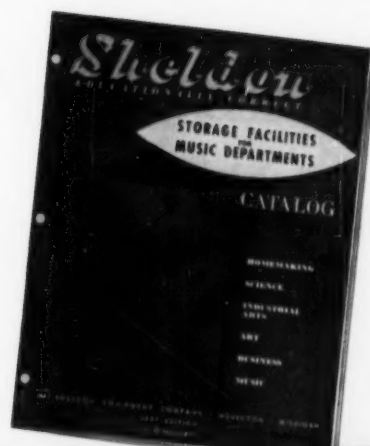
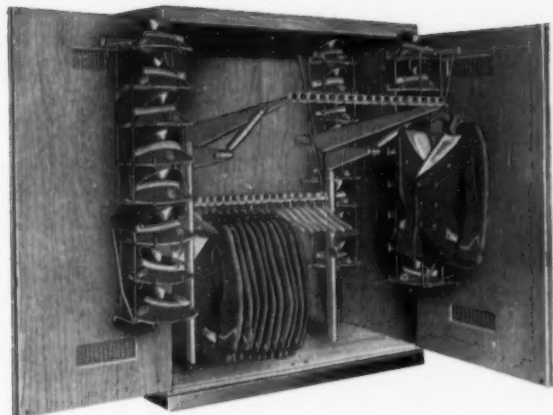
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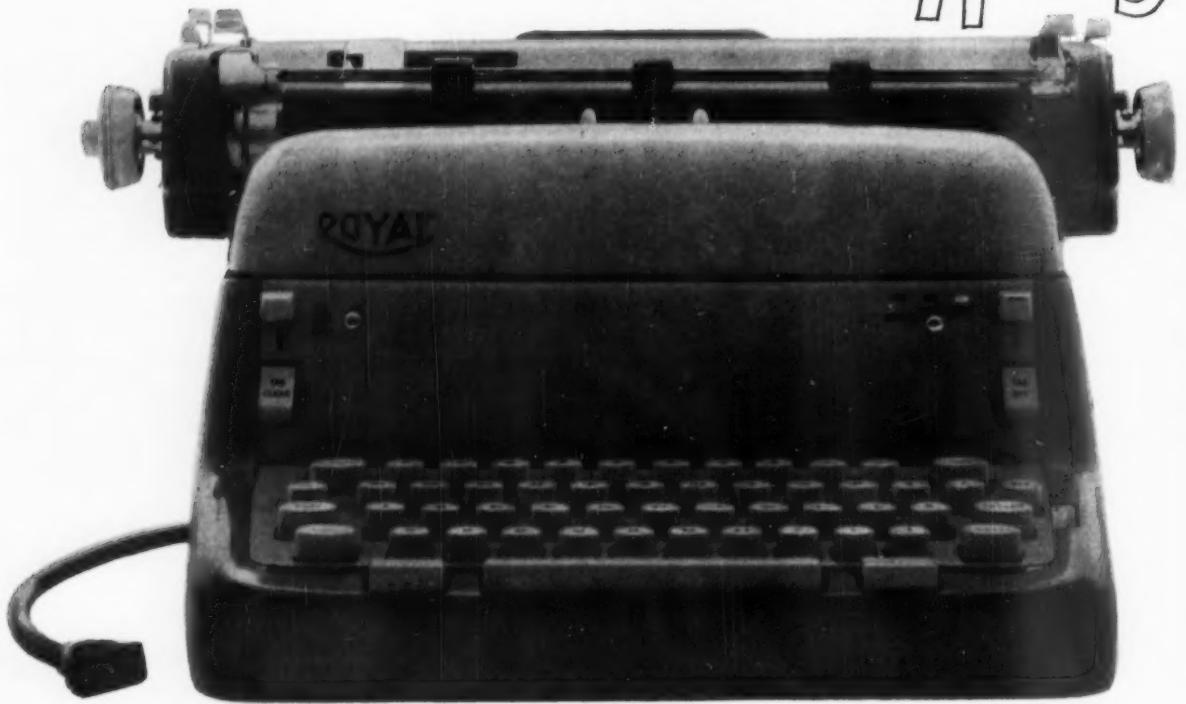
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## THE SCHOOL SCENE

(Continued from page 6)

the Association \$68,000, Everett N. Luce of Midland, Mich., N.S.B.A. president, announced recently.

Mr. Luce said that school board members have a special role of leadership in education to seek the best methods and techniques for the solution of the public school's critical problems. To help fulfill this leadership role, school boards must have a national voice and this grant will enable the N.S.B.A. to become a national voice by underwriting studies on certain problems of the public schools. Details of this program are listed in this month's *N.S.B.A. Report* (pg. 14) by the group's executive director, W. A. Shannon.

### BARS CHILDREN FROM SAYING GRACE

In Edgewater Park, N. J., controversy has raged over whether elementary school children may say grace before lunch. The attorney general of the state says it is illegal. The supervising principal says that the objection is ridiculous.

About 350 of the pupils, those who eat their lunch in the cafeteria, had been saying grace for some years in the classrooms before leaving to eat. The practice was abandoned in March after the board received a protest.

The state Attorney General, Grover C. Richman, Jr., Trenton, N. J., stated later that he will seek an amendment to the New Jersey law that would permit the saying of grace in public schools. He pointed out that it is the legislature's duty to declare public policy on the matter.

### SCHOOL AID

The board of education of Stamford, Conn., has raised the question whether it has been



### PARTY HONORS RETIRING PETALUMA BOARD MEMBERS

After serving together for ten continuous years, the Petaluma, Calif., board of education recently honored two of its retiring members at an informal party. Witnessing a doubling of school population during this period, the board built three elementary schools and conducted a pilot program in curriculum organization project on the junior high school level. Members are, left to right: Dr. C. E. Stimson; Dr. Hall Weston, clerk (retiring); Mrs. Helen Putnam, president; Charles Bock (retiring); and Norman Neal, Superintendent is Dr. Dwight Twist.

acting illegally for the past forty years in providing health services to parochial students.

The board has asked the State Education Department for a ruling. The decision to seek legal advice is the result of a question raised

by Mrs. Etta Topping, a member. Stamford now assigns public school nurses and physicians to five parochial schools on regular schedules.

### EDUCATION WEEK

The National Education Association has announced that Education Week will be observed November 10 to 16. The theme for the Week is to be "An Educated People Moves Freedom Forward."

Other announcements from NEA headquarters indicates that a teacher placement bureau will be established shortly to assist boards of education in finding necessary personnel, and to help teachers find suitable jobs. Details as to how this national placement office will operate have not been made available as yet.

Additional plans recently made known include, as a first step in its expanded service program adopted at the organization's centennial convention in Philadelphia in July, the establishment of a permanent TV-Radio office in New York to maintain liaison with network officials and producers as a boost for "quality" programs on commercial radio and television.

The association is also considering at this time the establishment of a nationwide plan for group insurance for its approximately 700,000 national membership.

### GINGER NEW NEA HEAD



Dr. Lyman Ginger has been elected president of the NEA at its centennial meeting in Philadelphia, Pa. He succeeds Miss Martha Schull, Portland, Ore.

Dr. Ginger, dean of the College of Adult Education at the University of Kentucky, Lexington, and current vice-president of the NEA, has been president of the Kentucky Education Association

(Continued on page 88)



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# **AMBRIDGE STADIUMS**



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## THE SCHOOL SCENE

(Continued from page 86)

and has worked on state and national committees for the improvement of public schools.

### AID FOR FEDERALLY AFFECTED AREAS

Federal allocations of \$8,132,593 to help build classroom facilities in federally affected areas, have been announced by the United States Office of Education. Thirty-three communities in 15 states will receive portions of this aid for construction of new or additional facilities to relieve school overcrowding.

### SCHOOL LUNCHES

During the year July, 1956 to July, 1957, the schools of the United States received 426.3 million pounds of food for lunch purposes. The distribution included 46.5 million pounds of butter, 71.8 million pounds of hamburger, 52 million pounds of pork, 35 million pounds of white flour, and other commodities in lesser quantities. The total value of the products was \$131.8 million, an increase of \$31.9 million over the preceding year.

### YONKERS SCHOOLS ASSAILED

A special survey group which recently conducted a study of the school plant in Yonkers, N. Y., has reported that many of the buildings are in poor condition and scores buildings, instruction, and budget. The survey was conducted by 100 specialists from the State Education Department and about 1200 Yonkers citizens participated in various phases of the study.

Although the basic subjects were found to be taught well, the following charges were made:

(1) The school system has existed on an austerity budget as related to equipment, books, and material; (2) libraries are starved

for books, staff, space, and equipment; (3) a program for better mathematics teaching is desirable; (4) there is need for more learning by doing in physical and social sciences; (5) standards for class size are below normal; (6) too little money is spent on education to achieve the objectives set up by the board; (7) many of the school buildings are in critical condition because the city does not provide enough funds for maintenance and repair; (8) the administrative staff should be reorganized to secure greater efficiency and responsibility, and clearer lines of communication between school personnel and citizens' groups.

After consideration, the school board approved many of the school reforms recommended by the survey. The reforms would require a budget of \$9,659,546—almost \$2 million more than is being spent this year. The proposed budget would: (1) create 97 new teaching jobs; (2) provide funds for salary increases for the present 970 teacher staff; (3) increase library book and textbook allowances; (4) reduce the sizes of some classes; (5) permit the establishment of a summer school, an adult education program, and a program for retarded children.

The board, who had conducted a public hearing to outline these proposed 1958 expenditures and to receive public reaction, will draft a final budget and submit it to the Yonkers City Manager and the City Council.

### EXPERIMENTAL STUDY ON STAFF UTILIZATION

The Jefferson County School District R-1, Jefferson County, Colo., has received a grant of \$27,200 from the Ford Foundation, for the year June 1, 1957 to June 1, 1958, in support of an experimental study on staff utilization. One thousand pupils from among the 10th, 11th, and 12th grade students from the eight high schools of Jefferson County

will participate in this study, Dr. Robert H. Johnson, superintendent, announced.

This study is one established in behalf of the National Association of Secondary School Principals, Paul E. Elicker, Secretary. Dr. Gordon E. Patterson, formerly director of research for the Santa Fe, N. Mex., schools, will serve as director of the project; the Ford Foundation director is Dr. J. Lloyd Trump, of the University of Illinois; and, Dr. Harold E. Moore, dean of the college of education at the University of Denver, will serve as institutional representative, in behalf of Denver University, to the Jefferson County Schools.

One of the prime aspects of the study involves present teacher certification methods. Teachers will be used who hold degrees from liberal arts colleges, as well as those who have been graduated from teacher training institutions. The class-size experiment will be conducted in classes ranging from 10 in one class to 60 in one class, with two teachers assigned to the larger groups. Of these two teachers, one will be a regular certificated teacher from a teacher training institution; the other will be a teacher with a baccalaureate degree from a liberal arts institution. Teacher curriculum committees are involved in the project this summer, and are at work developing curriculum materials to be used in the project.

### SCHOOL PLANS FIGHT AGAINST FLU

Supt. Harold S. Vincent was authorized recently by the Milwaukee school board to work out tentative plans with the city's health commissioner to combat Asiatic flu, should it spread among pupils and school employees.

The action was urged by Dr. Edward H. Krause, a school director, who quoted a warning by the United States health service that a nation-wide epidemic might occur this

(Continued on page 90)

## General Mills invites you to participate in the 1957-58 Betty Crocker Search for the American Homemaker of Tomorrow

Designed as an aid to both teachers and students, the Betty Crocker Search program has won praise and support from educators throughout the country. Last year, more than 300,000 young women from over 11,000 public, private and parochial high schools participated—almost half of all the high school senior girls in America. As in past years, the National Association of Secondary-School Principals has placed this activity on the approved list of National Contests and Activities for 1957-58.



### AIMS OF THE SEARCH

- To help call attention to the importance of schools in American society
- To help schools instill in young women an appreciation of the home
- To emphasize to students and parents alike the importance of homemaking as a career
- To honor with scholarships girls best representing the qualities of a successful homemaker

### REWARDS OF THE SEARCH

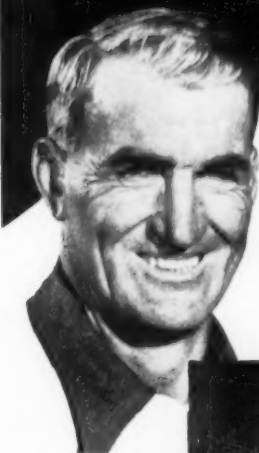
- 4 national scholarships (\$5,000, \$4,000, \$3,000, \$2,000) totaling \$14,000
- 2 scholarships in each state and the District of Columbia totaling \$92,000
- Complete sets of Encyclopaedia Britannica for schools of State Homemakers of Tomorrow
- Educational tours of national historic shrines for 49 State Homemakers and their teacher advisors
- Educational aids for teachers of all subjects

### HOW TO ENROLL YOUR SCHOOL

If you have not received an enrollment form and full information, please write The Betty Crocker Search, 400 Second Ave. So., Minneapolis 1, Minn. All enrollments must be postmarked by October 31, 1957.



# "We saved over 1600 man hours using 'UP-RIGHT' SCAFFOLD-ON-WHEELS"

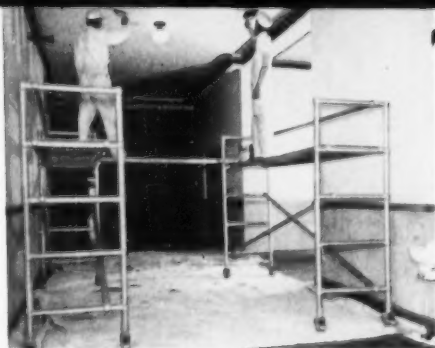


"Our summer program of overhead building and class-room maintenance that formerly took 13 weeks is now completed in only 8 weeks thanks to Up-Right's mobility and rapid assembly!"

Stairways are taken in stride . . . legs in stantly adjustable for perfect leveling of platform. ➡



## UP-RIGHT SPAN SCAFFOLDS



Write for descriptive circular!



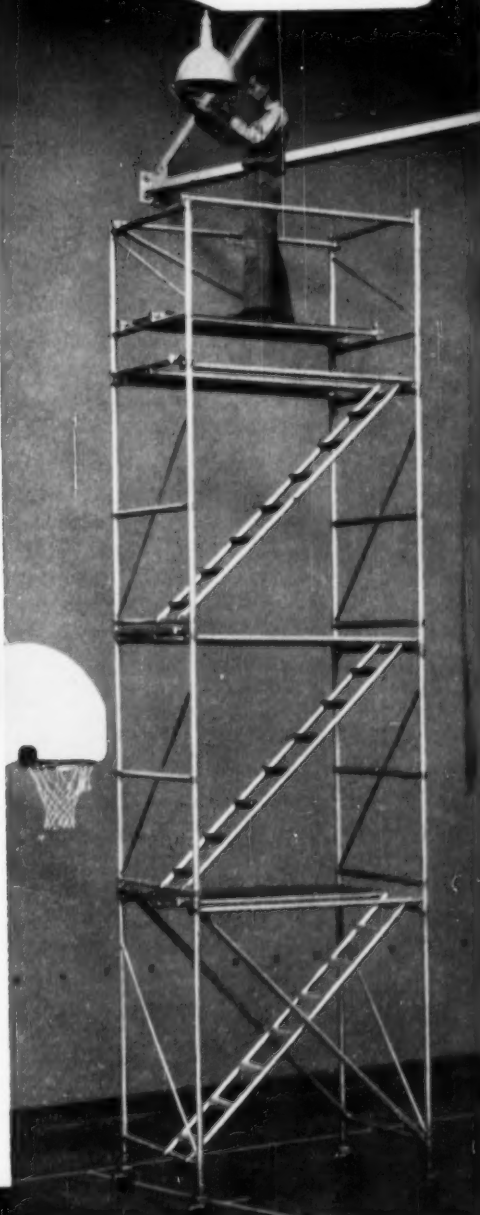
"Two 10 ft. span scaffolds pay for themselves on any school paint job of 6 rooms or more," says Leonard T. Anderson, painting contractor, Turlock, California.

## "UP-RIGHT" SCAFFOLDS

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FACTORIES: Berkeley, Cal. and Teterboro, N. J. Offices in all Principal Cities

**NEW, FASTER, SAFER WAY  
TO GET UP IN THE AIR  
AND ROLL WITH THE JOB.**

In minutes, a mobile tower of any height desired is erected by setting individual sections one on top of the other. The one-piece folding sections are quickly assembled without tools, wing nuts or bolts.



**UP-RIGHT TOWER SCAFFOLD**  
Aluminum Alloy





## Adjustable Height WALL MOUNTS

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### WARDROBE SYSTEMS

Solve the pupil wraps problem efficiently with Wallmount Coat and Hat Racks. Mount on any available wall space. Hat shelves and hanger bar adjustable on permanently attached columns to height for any age group. Double hat shelves and double row of spaced coat hooks accommodate 6 pupils per running foot. Basic 3' 2" or 4' 2" units interlock to make continuous racks to fit any space or capacity requirements.

## OTHER Schooline® UNITS



### CHALKROBE®

Dual-purpose wardrobe rack. Provides two 4 ft. hat shelves, 4 ft. Hook and Hanger rails for coats adjustable in height to all age groups. 4 ft. overshoe shelf. And, on other side a 50" x 48" chalkboard. Portable or stationary.



### CORKROBE®

Identical to Chalkrobe but with pin-up cork board instead of "Chalkboard". These units permit complete flexibility in use of floor space. Can be anchored to floor, or wheeled about on casters. Hold wraps out of the way in orderly and efficient manner.



### CLOSURE UNITS

With closure panels (as original equipment or add-on units) Chalkrobe and Corkrobe units serve as flexible room dividers, movable walls or screens. Widely used to enclose temporary class rooms, to "build" cloak rooms, meeting rooms, etc.



### OVERSHOE RACKS

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Write for "Schooline" Catalog 206

**VOGEL-PETERSON CO.**

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## THE SCHOOL SCENE

(Continued from page 88)

fall or winter. Director George H. Hampel, Jr., said the schools would be a vital spot for the flu and that the schools might want to inoculate pupils, teachers, and other school employees.

In later action, the Milwaukee city health commissioner ordered Asiatic influenza vaccine for 7000 city employees and for about 5000 school personnel. The cost of this vaccine to the school board will be approximately \$2,400.

School alertness to the predicted epidemic is following President Eisenhower's request to Congress for \$500,000 to enable the country's public health service to prepare for any large epidemic of the disease, which at August 2 had stricken 11,000 Americans and caused three deaths.

## SCHOOL POLICY AND ADMINISTRATION

### PROGRESS AND PROBLEMS OF EDUCATION TV

Despite extravagant claims and extensive pouring in of philanthropic funds, educational television is progressing slowly, according to recent reports. Two major obstacles are: uncertainty about television's prime role in the classroom pattern—where ETV's real value lies in the classroom, considering its instructional limitations; and television's need for considerable funds.

Words of caution about the relative merits of television in the classroom have been coming from educators. A great amount of research has been called for in the areas of TV and the classroom pattern, training the TV teacher, etc.

In a recent national radio program, University of Chicago's Chancellor Lawrence A. Kimpton and Philosophy Professor Richard P. McKeon agreed that instruction by television cannot by itself solve the problem of educating the increasing number of students in American schools. They pinpointed television's inability to meet the diversified needs of individual students as one major deficiency.

"Fundamental questions the educators must ask have to do with what is being taught, for what purposes, and to whom," Chancellor Kimpton said. "Television is an important means for communicating with students, but it will not solve the problems of education."

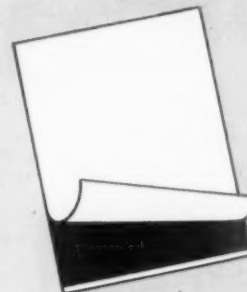
"The educators' goal must reflect the changing character of the modern world and the demands it makes upon its inhabitants," Mr. McKeon stated. "Such goals cannot be attained by information, exhibition of films, or exposition by a teacher in front of a camera. They require a capacity for understanding the problems of our time and the cultivation of insights into the way in which they can be met."

An experiment in one aspect of ETV-classroom relationships—how will educational television fit into the work of the classroom teacher—received special attention in an eight-page report recently published by the Educational Television and Radio Center of Ann Arbor, Mich. In the report, Hagerstown, Md., History Teacher Jean Moser explains the "teaching team"—television teacher presents lesson; classroom teacher reviews lesson, clinches factual material, makes assignments—used in her districts' extensive, nationally publicized closed-circuit TV hookup. She also discusses class size, instructional techniques and materials used, typical lesson, etc. Her observations include: interest span of average

(Continued on page 92)

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### MUSIC DUPLICATING MASTERS



8 staves to page. Ideal for making special arrangements and duplicating for classes and choirs, glee clubs, etc.

\$7.50 Per 100 in Lots of 100  
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### MUSIC PADS



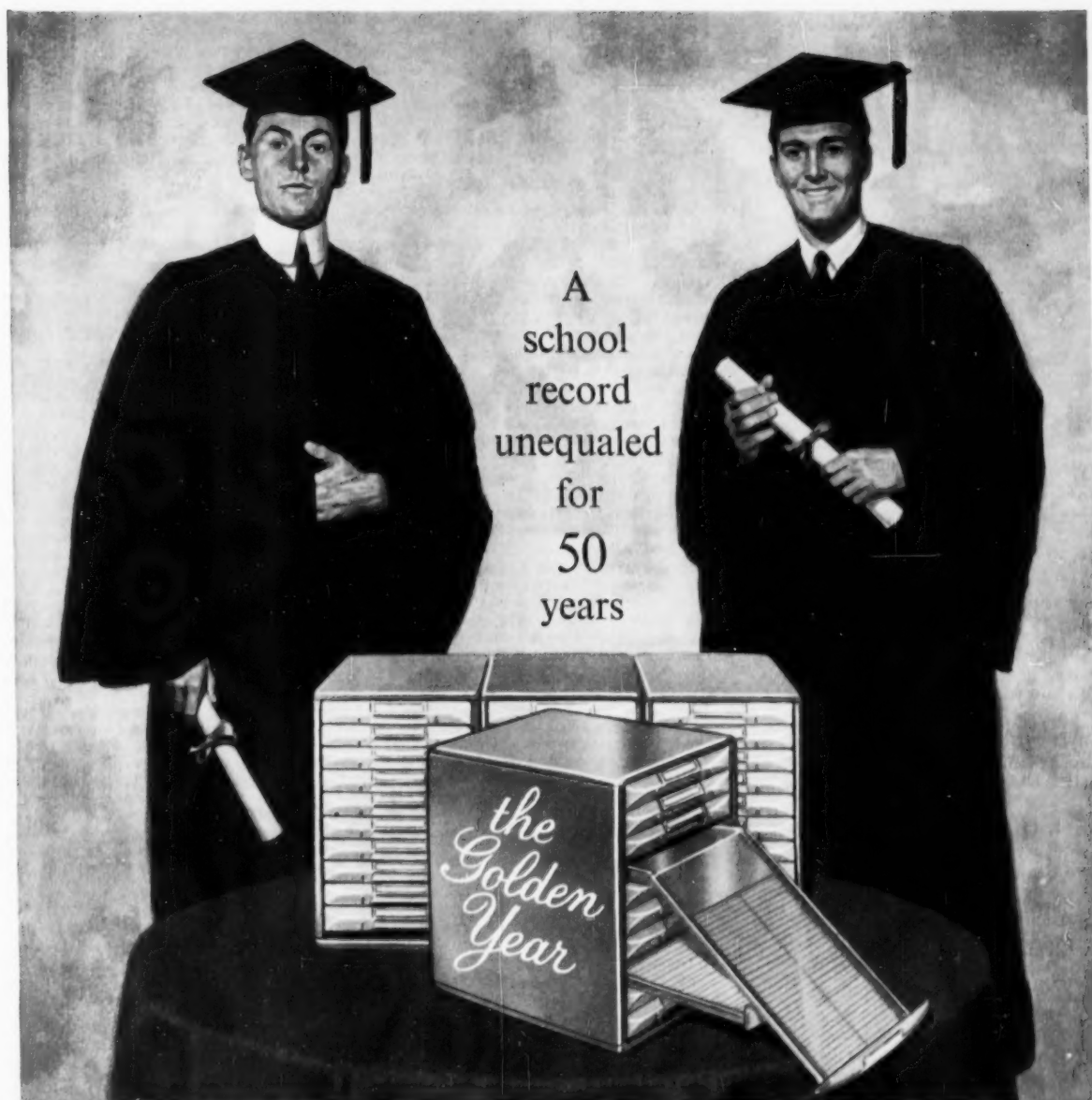
50 sheets per pad, printed 2 sides, with 5 binder holes for 2 and 3 ring binders.

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**Remington Rand**  
DIVISION OF SPERRY RAND CORPORATION

## THE SCHOOL SCENE

(Continued from page 90)

student is 30 minutes televiewing; television screen provides effective fixation point for group instruction; "visuals" are needed to explain lesson ideas. One problem: counteracting home-developed, distracted TV listening habits of some pupils.

Conclusion: "We do not believe that the classroom teacher has been replaced by a monitor—we are convinced that the classroom teacher part of the team must be better qualified, and a more forceful teacher than was required in the traditional setting. He or she must be thoroughly grounded in the subject field, in child psychology, and teaching techniques. It takes as long if not longer to plan a good lesson for the classroom part of the period as it did under the usual pattern."

Current taxpayer resistance to school building and operating costs includes the money needed for educational television. Television is not a relief to the strained local district budget. Of the two source-to-outlet types—closed circuit and broadcast—the first requires less funds and is experiencing more steady growth with over 125 closed circuit systems of one form now operating in the country.

Finance-wise, the biggest single boost for educational TV has been the support of The Fund for the Advancement of Education. Latest on its long and impressive list of contributions is the recently announced "National Program in the Use of Television in the Public Schools," beginning in September, 1957. Objectives of program are to learn its: feasibility of teaching large classes by television; scheduling and school building problems in teaching a large number of classes over television at low cost and without sacrificing quality in instruction; capital and operating budgetary implications in teacher time, build-

ing space, equipment, etc.; best ways to develop teacher talent.

The eight cities participating in this experiment at the outset: Atlanta, Cincinnati, Detroit, Miami, Norfolk, Oklahoma City, and Philadelphia. The Fund appropriation is \$986,000.

Concrete service to the progress of ETV has been rendered by such organizations as the Educational Television and Radio Center and the Joint Council on Educational Television, Washington, D. C. Example of this is the ETRC's provision of a series of programs for use by the 27 noncommercial stations affiliated in its National Education Television network—quality programs that few local stations could finance or staff independently.

Concerning the N. E. T. network, an ETRC Research Report just published surveyed the "growth and changes in the nature of educational television programming by N. E. T. station." This report shows that, during a one-week test period, 21 stations of the network broadcast a total of 645 hours as against 468 hours by 19 stations in 1956. The proportion of live to filmed programming dropped from 60 per cent in 1956 to 58 per cent this year. The stations used a total of 209 hours of programs distributed by ETRC, compared to 118 last year.

Programs for in-school and after-school viewing showed a 52 per cent increase this year, of which 59 per cent was directed at school viewing. Most popular program categories, the survey showed, were music and dance, literature, science, and national and world affairs.

A note of the legal acceptance of television in the schools is the recent acceptance by the Illinois Supreme Court of University of Illinois arguments that it could finance educational television with money appropriated for general use. The high court, in denying

a challenge of taxpayers, said that universities are the prime source of discoveries for betterment of mankind. Television, it said, cannot be singled out for special treatment because it is relatively new.

Look to the future for educational television indicates continuation of slow, steady progress—with fastest development in closed-circuit, in-school viewing. Greatest single advantage of educational TV is its ability to extend the services of the showman-teacher, whose demonstrations are suitable for tele-teaching. Claims that educational television is the answer to rising school costs, crowded classrooms, and the teacher shortage are questionable—especially when television seems to be creating a shortage of "television teachers."

## COMMUNITY-BOARD MEETINGS

In recent years our schools have made giant gains in obtaining citizen interest and understanding of general school activities and, more specifically, of board functions. While techniques running the gamut of modern public relations practices have been used successfully, one of the most direct and effective devices is the board meeting orientated especially for public consumption.

These meetings are of two types: (1) "educational" meetings in which the administration and/or teaching staff explains or demonstrates with regular classes school teaching processes; and (2) regular board meetings highlighting the work of the board of education.

Some of the most successful community-board meetings have been those conducted during the past three years by the San Diego, Calif., board of education. The meetings have been held in the evenings in school auditoriums throughout the city. Designed to acquaint the citizens with the operation of the board, the meetings have attracted as many as 500 persons at a single session. While instructional

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reports and business items of special interest to citizens have been scheduled, the regular agenda has been followed to point up policy making, personnel, and business functions.

After the meeting, a social period sponsored by the individual school parent-teacher association has enabled board members to meet members of the staff and community in a relaxed way, according to superintendent Ralph C. Dailard. This two-way communication—that of citizens understanding board problems and board members meeting staff and community—has evinced such interest that the board plans to continue community meetings indefinitely.

A variation on this practice has been reported by the Southern Humboldt Unified District of Miranda, Calif., where the board has established a series of community forums. In these forums, major school problems are broken down into study sessions, and citizens are invited to discuss them under the leadership of a board member and a "resource" person. The forums are held twice each year and have been eminently successful in establishing board-citizen understanding according to superintendent Sam W. Miller.

### HOW CAMBRIDGE PASSED ITS REFERENDUM

In past years School District 227, Cambridge, Ill., experienced some difficulty in passing referendums which would increase the tax rate. Faced with a doubled enrollment in the next five years, the schools needed additional moneys to finance new facilities; to educate and sell this need for increased taxation to the public, a six-point program was employed:

1. The State Department of Education was asked to approve the building needs.
2. A citizens' committee was formed to work independently of the board.

3. An architect was employed who was well trained in school planning and construction and costs.

4. A qualified bond consultant was employed to aid in preparing legal documents before the election, readying the bonds after the election, and investing the funds.

5. A brochure was issued describing the election information, the propositions, the future enrollment, and the estimated costs of the actual needs.

6. The election was held soon after school opened.

The referendum passed, an educational fund increase being voted with the building issue.

### SUMMER PROGRAMS

School-sponsored summer programs, which have been expanding rapidly in recent years, now include an extensive number and variety of courses. Two California school districts have reported educational and recreational programs that seem indicative of the trends in this phase of educational service:

Santa Cruz, Calif., has established a program for kindergarten through twelfth grade in three levels of learning: (1) remedial reading, covering six weeks for students with reading problems; (2) enrichment, including grade and subject courses for the average student; and (3) college preparatory, offering concentrated courses for students who desire to improve their knowledge in specific subject matter fields, as well as special subjects such as typing, shop training, and driver training.

An extensive recreational summer program was conducted by the Orinda, Calif., Union Elementary School District. This outdoor education program, conducted at Echo Summit near Lake Tahoe, included camping, history, geology, weather and conservation, health and safety, etc., for present fifth-grade children in the district. In addition to this sum-

mer camp was a music school, a recreation program, and a regular instructional summer school, which is divided into enrichment and skill courses.

## SCHOOL STAFF

### IN-SERVICE TEACHER TRAINING

In an effort to improve their in-service training programs, as increasingly important phase of teacher personnel policies, local school districts recently have been scrutinizing their in-service training to determine its real value and have been planning and conducting expanded programs.

Of the programs reported, a major trend has been, where facilities and staff permit, to offer courses in the local district that: allow credit for salary schedule advancement; are especially slanted to local district problems; intend to be much more practical for the professional advancement of teachers than standard university courses.

Typical of these programs is the one inaugurated by the Oceanside-Carlsbad, Calif., Union High School District this summer in the extended day division of the community junior college. The program combined in-service training and "hurdle" credit work. Details: topics were selected by the teaching staff; courses were taught by staff members; courses covered two hours per week for 19 weeks; one unit credit was allowed for course completion; instructors chose between accepting the credit or regular hourly professor rates. Courses offered this summer: curriculum planning and development in the district during the first period and school finance and budget procedures during the second.

Indicative of the popularity for this type

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Inc., Institutional Seating Division,  
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Strongest, Last Longest, Shwayader Bros.,

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of training experience: 40 per cent of staff members participated in both series of lecture-discussion groups, according to superintendent Frank M. Chase, Jr.

### **EXTRA PAY FOR ADDED MATH AND SCIENCE TEACHING**

The New York, N. Y., board of education approved recently a plan to permit teachers of science and mathematics to teach a sixth period at extra pay. This extra-work, extra-pay plan will be applied only when a school cannot recruit a regular or substitute teacher. The rate of extra pay is 1/1200th of the teachers' annual salary.

The plan goes into effect this month for the coming year despite the vigorous objection of the local high school teachers association which maintained "that the schools lack teachers of math and science because high school teachers are not paid enough. A salary differential for the entire high school staff would cure the shortage."

As of last October, superintendent William Jansen noted that there were 179 vacancies in mathematics and 129 in the sciences.

### **RAISE TEACHERS' PAY**

The minimum pay of teachers in New Jersey will be increased \$600 a year, beginning July, 1958, under a law signed by Governor Meyner.

The law also provides annual steps of \$200, to a maximum of \$6,200 a year. Teachers with degrees will receive a minimum of \$3,800, and teachers with advanced degrees, \$4,000.

In Massachusetts, the State House approved a bill for establishing a \$3,500 minimum annual salary for teachers.

### **TEACHER SALARIES INCREASES REVIEWED**

In recently approved salary schedules, the average increase for teachers' salaries was well in excess of \$400, school districts across the country reported.

Representative average raises: \$740 for all degree teachers in Harrison, Ark.; \$300 to all teachers in West Lafayette, Ind.; \$399 in the base salary of teachers in the Plainview Tex., schools; \$200 for Yonkers, N. Y., teachers; \$400 in Ipswich, Mass.; \$517 to District 110 teachers, Walla Walla, Wash.; \$100 in Cincinnati, Ohio; from \$70 to \$350 in Sioux City, Iowa; \$200 in El Monte, Calif.

A detailed breakdown of a typical 1957-58 salary schedule has been adopted in district 4, Champaign, Ill. The schedule arranged in seven classifications, provides new minimum and maximum salaries for each classification. Teachers with no degrees begin at \$3,500 per year and advance to \$4,150 in the fifth year; teachers holding an A.B. degree start at \$3,900 and go to \$5,300 in the tenth year; teachers with an A.B. and 15 hours' college credit start at \$4,000 and go to \$5,700 in the twelfth year; teachers with an M.A. degree begin at \$4,150 and go to \$6,300 in the fifteenth year; teachers with an M.A. and 15 hours' college credit start at \$4,250 and go to \$6,400 in the fifteenth year; teachers with an M.A. and 30 hours' credit begin at \$4,350 and go to \$6,800 in the seventeenth year; and teachers with an M.A. and 60 hours' credit start at \$4,550 and go to \$7,000 in the seventeenth year. All teachers are given credit for outside teaching experience. For the year 1957-58 the school personnel will advance one increment but will be limited to an increase of \$500 in the schedule.

Ranges in new salary schedules for bachelor-degree teachers: \$4,300 to \$7,615 in 12 steps in Indio, Calif.; Richmond, Va., \$3,300 to \$4,800 in 11 years; Howard County, Md., \$3,600 to \$5,300 in 15 years; Milford, Conn., has \$4,000 to \$6,600 in 13 increments.

Percentage-wise, an analysis of a typical 1957-58 salary schedule has Piedmont, Calif.,

giving an 8.7 per cent average increase in salary to teachers, ten per cent over-all increase to administrators; and 8.1 per cent increase to classified employees. The minimum teacher wage there now is \$4,300 for a beginning bachelor and the maximum is \$7,900 for a master degree and an additional 48 credit hours.

## **SCHOOL BUILDING AND OPERATION**

### **TEACHERS' SUGGESTIONS IN NEW SCHOOL PLANNING**

In planning new school buildings, co-operation between many groups has become the practice in almost all school districts. During the past several years, school board members, superintendents, and other administrative personnel, working with the architects and, in some cases, educational consultants, have pooled their ideas and knowledge to produce satisfactory plants.

More recently, this trend toward co-operative planning has included, in many cases, (1) committees of lay persons—especially prominent members of the community and/or lay "specialists," such as engineers, contractors, and trades men, etc.—(2) teachers; and (3) students.

Since teachers use the school plant most directly in the work that the buildings are intended to facilitate, their opinions have been requested and considered in the planning of more and more schools.

A good example of how well teachers' suggestions are used in new school planning has been reported by the La Mesa-Spring Valley, Calif., school district recently. Engaged in a school building program that will eventually produce an average of one new school each year for several years, this district held a series of meetings for the purpose of obtaining teachers' ideas on desirable factors in school construction.

At the meetings, conducted by Dr. M. Ted Dixon, associate superintendent, teachers reviewed samples of building materials, equipment, glass, paint, and architects' drawings of a variety of school buildings throughout the state.

The teachers spoke freely and a record was kept of their comments, suggestions, criticism, and praise of schools. They also submitted rough layouts of ideal classroom situations, playground arrangements, and storage facilities. These verbal and written suggestions were presented to the citizens advisory building committee, and finally to the architect.

According to R. H. Manzella, co-ordinator of publications, the meetings were advantageous in two respects: (1) the buildings were better planned because of the teachers' ideas incorporated into them; and (2) the teachers learned a great deal about school construction, became more familiar with administrative problems involving budget limitations and the building program, and were able to look around their classrooms and say: "This I helped to design. If I don't like it, why didn't I say so before."

### **INDUSTRIAL ARTS AND ELEMENTARY SCHOOL**

A unique two-in-one school building to house the High School of Industrial Arts and Public School 59 (an elementary school) is under construction in Mid-Manhattan, New York City. The high school, planned for an enrollment of 2000 will be six stories above a one-story unit, extending over the entire

(Concluded on page 96)





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walls, ceilings and other partitions are constructed of proven fireproof materials. Many schools ravaged by fire might have been saved if the flames had been contained only a few minutes longer! Underwriters Laboratories tests fully demonstrated that standard walls and ceilings of metal lath and gypsum plaster (both non-combustible) will restrain fire of up to 1800 degree intensity for a minimum of one full hour. Those sixty minutes could mean the difference between life and death for the children in your classrooms.

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## THE SCHOOL SCENE

(Concluded from page 94)

plot and arranged for gymnasium, auditorium, and cafeteria units for the high school. The elementary school for 600 children will be two stories high above multipurpose rooms, lunchroom, etc. The total site measures only 62,000 square feet. The contract cost will approximate \$9,500,000.

### JANITORS' COSTS

The Chicago board of education has received a report from Arthur Young & Co., based on a study of the custodial services of the schools, finding shortcomings in the present plan of handling the cleaning, engineering, and other phases of school building care. The report declares that as much as two million dollars a year could be saved by reorganizing the janitorial service and the plan of compensation. The engineer-custodians now receive from \$575 to \$855 per month, plus overtime payments and other emoluments. The Young Company found that some of the schools are overstaffed, that some of the workers do not put in the full time for which they are paid, that some of the janitors are overage for the work they should do, and that there is insufficient supervision which will not insure satisfactory work.

## SCHOOL BUSINESS

### TUCSON'S NEW SYSTEM FOR SMALL PURCHASES

A study of purchasing procedures in the Tucson, Ariz., schools during 1954-55 and 1955-56 revealed the startling fact that over 30 per cent of purchase orders issued were for amounts under \$10. The average amount

on these small orders in 1955-56 was \$4.73. Since labor costs in issuing a purchase order came to about \$1.71, it was evident that the cost of operations were being increased substantially by these small items.

The formal purchase order in the Tucson system consists of five parts: the original goes to the vendor; the others are distributed to the comptroller for encumbering, to the warehouse for receiving, to the person originating the requisition and to a numerical file for reference. The accounting system in use requires that budgetary accounts be encumbered whenever a purchase order is issued, to be disencumbered and charged with the corrected amount when the invoice is paid.

About a year ago, the board of trustees authorized trial of a new system for small purchases, according to Mr. Morris F. Baughman, school examiner. This entails the use of a form called a Purchase Certificate. The Purchase Certificate is good only for items costing \$10 or less. It is prepared in triplicate by the principal or department head rather than the purchasing agent. The original copy again goes to the vendor. The second stays with the department which originates the certificate. The third copy goes to the warehouse, if the merchandise is ordered by mail, to be receipted and returned to the comptroller when the goods are received. If the items are picked up locally, the person who receives them signs the third copy and sends it to the comptroller.

The comptroller keeps the supply of numbered purchase certificates and issues them to school principals and others authorized to use them upon request. He thus can maintain a fairly accurate record of the amount outstanding against any particular budget category. Since the amounts are small, it is felt that this method of purchasing without formal encumbrance does not weaken the system of

budgetary control. This is particularly true since the comptroller has charge of the budget after its adoption, and can always stop issuing the certificates if any category becomes critical.

The purchasing department is relieved by this method of the necessity of handling these small nuisance orders, where the amounts involved are so small that the purchasing agent's skill and knowledge of sources of supply would be of no benefit in securing better prices. Enough control has been retained, however, by the limitation on the amount of each purchase by certificate, and the method of issuing blank certificates, to guard against any promiscuous buying by persons other than the purchasing agent.

### TRENDS IN SCHOOL COSTS

June was the first month this year in which the average yield of 20 bonds held firm at the previous month's level. The Bond Buyer of both June 27 and July 25 reported 3.43 per cent for May and June, respectively. At the same time, over \$130 million school bonds were reported sold, in contrast to last year's June figure of almost \$148. The Bond Buyer of July 19, 1956, incidentally, reported an average 20 bond yield of 2.66 per cent.

According to Dodge, June saw school construction contracts let for \$273 million or ten per cent over the same month last year; the Departments of Labor and Commerce jointly estimated new construction expenditures for public schools at \$43 million, as compared with the \$46 million of last year and the \$40 million of May, 1957. In the first six months of 1957, the new construction expenditures amounted to \$246 million, to \$248 for 1956, or a decrease of one per cent.

The American Appraisal company reported the national average on the construction cost index increased from 659 in May, 1957, to 664 in June of this year.

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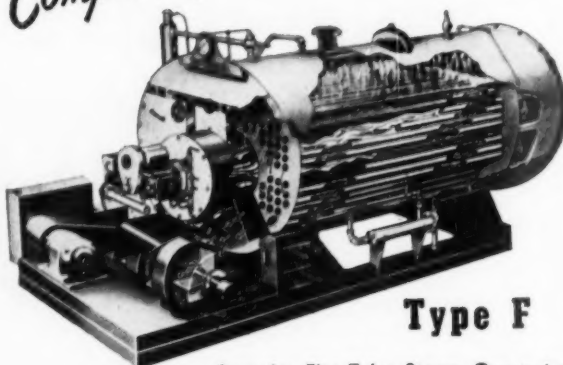
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## NEW BOOKS

### School Board Studies

By Maurice E. Stapley. Paper, 56 pp. Midwest Administration Center, University of Chicago, Chicago 37, Ill.

This study, one of six to be undertaken by the Center staff, takes up seven aspects of the subject. The study brought out eight significant facts: (1) Appointed board members were judged more effective than elected members. Elected members, however, did not show significant superiority over appointed members. (2) Men were judged to be superior to women. Men were more effective in some respects; they tended to support the executive officer. Women were effective in four respects: They made greater efforts to study their duties, were more willing to speak about school needs, accepted responsibility for improving education, and were more willing to spend time outside the community for promoting school welfare. (3) Board members who had served from four to six years were judged more effective than those who had served three years or less. (4) Although there was a steady increase in school board effectiveness, as the income pattern of members ranges up to \$8,000, the variables measured in this situation were education and opportunity. (5) It was found that board members who had had more than four years' college preparation were more effective than members with one to four years in college. (6) Individual members of boards which operated in accordance with written policies were considered more effective than those who acted without written policies.

### A Citizen's Planning Guide to Low Cost School Construction

Paper, 32 pp., 25 cents. Allied Masonry Council, 1520 Eighteenth St., N.W., Washington, D. C.

Intended for the layman, but also good, helpful reading for school board members, this booklet explains in simple language, what is meant by advance planning, good site selection, design, and economy, etc. It also contains well-illustrated examples of attractive, low-cost school buildings with information and advantages of masonry products in schools.

Last chapter outlines an especially good six-point program on what the citizen can do to "obtain better schools for his community."

### Merit Pay for Teachers?

By Theodore L. Reller. Paper, 6 pp. Field Service Center, Department of Education, University of California, Berkeley 4, Calif.

A guide for the study of merit pay, pointing to the possibilities and problems associated with administering a merit-pay program. It (1) provides an overview of the complexity of the problem, (2) suggests the community approach to the study, and (3) provides guidelines for such a study.

### Something for a Price

Paper, 12 pp. Education Department, Illinois State Chamber of Commerce, Chicago 6, Ill.

This is declared to be "the story of federal aid for school construction and what it will cost Illinois."

Legislation recently under consideration in Congress is reviewed. The Chamber proposes that no federal legislation be passed, but that Illinois devote a loanable revolving fund amounting to \$10,000,000 to local school districts who have difficulty in financing school building projects.

### Economies in School Building Construction

Paper, 69 pp., \$1.50. Illinois Association of School Boards and Illinois State Chamber of Commerce, Chicago 6, Ill.

A report of the proceedings of a state-wide conference on economies in school building construction. Among the important discussions by experts in the field of school construction were "How to Cut Costs in Financing Construction," by Harold Norman; "What the Architect Can Do to Secure Savings in Construction," by J. M. Barrow; "A Contractor's Suggestions on Economical Construction," by Frank Behnhauer; "Newer Approaches in School Building Construction," by Dr. Jack R. Childress; "Determining Over-all School Building Needs," by Dr. Fred Barnes.

### Better Education for Nonacademic Pupils

By Paul W. Harnly and Stephen A. Romine. Edited by Kenneth N. Nickel. Paper, 32 pp. North Central Association of Colleges and Secondary Schools, Wichita, Kans.

This study recommends a plan for identifying pupils who cannot carry on the regular academic program of studies. It outlines methods of adapting the curriculum and of helping teachers adjust their methods. Sympathetic and effective attention to this problem is urged.

### Are Austin Children Physically Fit?

Prepared by Grace Garde and Edward J. Bork. Published by the public schools of Austin, Minn.

This is a report by the elementary physical education supervisors on the Kraus-Weber tests, given last fall and spring in the elementary schools of Austin. The tests were administered to all children in kindergarten through the sixth grades in the fall of 1956 and again in the spring of 1957. Of 3992 children tested, 3992 passed the upper back test; 3992 passed the lower back test; 3991 passed the psoas test; 3807 passed the abdominal test; 3623 passed the flexibility test; and 3488 passed the abdominal test No. 2. A total of 724 children, or 18.0 per cent, failed in one test; 74, or 1.8 per cent, failed in two tests; and 1, or .02 per cent, failed in three tests—a very satisfactory showing.

### Report of Visits to School Districts in Various Communities

Paper, 55 pp. Utah School Merit Study Committee, Salt Lake City, Utah.

This is a report of visits during May, 1956, of ten persons of the Utah School Merit Study Committee to nine school systems and two universities in the Midwest for the purpose of gathering firsthand information concerning personnel and salary programs. The findings indicate that teachers generally like the district where they work and that the average tenure is 9 years, even including new teachers; that the administrators do attempt to even up teachers' loads and make teaching as pleasant as possible; that merit is accepted as a matter of principle because it is unfair to give everyone the same salary; that teachers generally seem satisfied with the salaries they receive; that the teachers felt that they had not really had enough to do with the establishment of the program and that there was a lack of communication with the administration; that the administrator's desire teachers to receive fewer increments in order that the teachers will get more money more quickly.

(Concluded on page 100)

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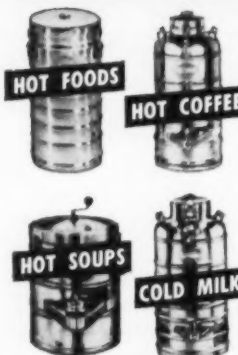
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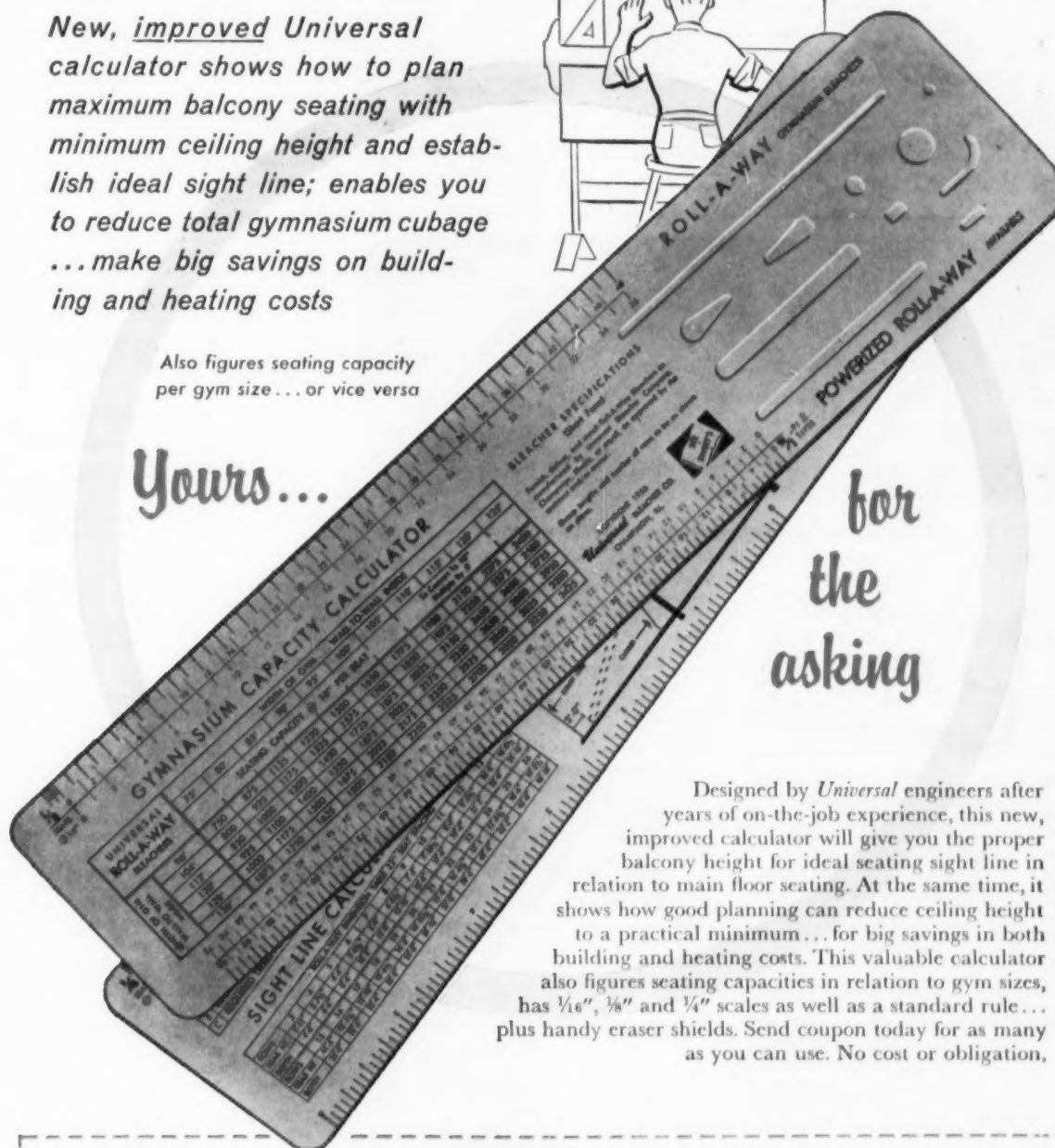
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## NEW BOOKS

(Concluded from page 98)

### Introduction to Statistical Analysis

By Wilfrid J. Dixon and Frank J. Massey, Jr. Cloth, 488 pp., \$6. McGraw-Hill Book Co., Inc., New York 36, N. Y.

This is the second edition of a book which has been widely used in college departments of education. It is adaptable to one-semester as well as one-year courses for students preparing for educational administrative positions. A new chapter on probability has been added.

### Relative Economic Status of Secondary School Teachers in Metropolitan Toronto, Canada

By C. C. Belden and R. M. Lenthern. Paper, 52 pp., \$5. Toronto and District Urban School Trustees Association, Toronto 18, Canada.

This important study, carried on by the local School Trustees Association, with the assistance of Industrial Relations Counselors Service, provides an

interpretation of current statistical information on the status of teachers in comparison with other professions and occupations in the Toronto Area. The report shows that university trained industrial employees in Toronto are generally better off economically than employees and teachers engaged by the boards of education.

The report which is fully documented, indicates clearly that raises in the salary levels should be provided and that better fringe benefits should be voted. The report recommends too consideration of the merit principle in recognition of especially competent teachers.

The study is of a type which school boards associations in the metropolitan areas might well undertake in order to better the conditions of their teaching staffs. It is to be regretted that such studies in the states have been made only through the initiative of teachers' associations.

### Schools for New York

Compiled by Arthur Levitt. Paper, 38 pp. Office of the Governor, Albany, N. Y.

A report of the Governor's committee on the marketing of school bonds to finance needed school construction. A proposal for the establishment of a state stabilization bank which would be authorized to buy, sell, and make loans on securities issued by local school districts within the state, to advance funds to school districts, and to act as joint fiscal agent of a number of districts, and to guarantee the bonds of school districts.

### A Short Dictionary of Mathematics

By C. H. McDowell. Cloth, 40-64 pp., \$2.75. Philosophical Library, New York 16, N. Y.

This book embraces brief definitions of terms in (1) arithmetic and algebra, (2) plane trigonometry and geometry. The simple, technically-accurate definitions are supplemented with explanatory figures and a few tables. The latest theory and the historic definitions are both included.

### Compendium of State Government Finances in 1956

Paper, 65 pp., 40 cents. U. S. Government Printing Office, Washington 25, D. C.

This co-operatively prepared report of the Department of Commerce and the Bureau of the Census includes in addition to a wide variety of data, a statement of Education expenditures by states. It indicates that the total state outlays were \$5,679,480,000. Capital outlay was \$379,600,000 for institutions of higher learning, and \$86,544,000 for other educational institutions. These capital outlays listed do not include local expenditures by boards of education. The total expenditure for education by states increased by 12.1 per cent over 1955.

### Real Property Appraiser's Handbook Conference Handbook

Paper, 20 pp. University College, Syracuse University, Syracuse 2, N. Y.

While this booklet frankly advocates the use of University College for educational conferences of New York State school authorities, it contains a series of practical pointers about the planning, the location, the housing, and general problems of an effective educational conference.

### Headless Horsepower

Paper, 32 pp. The Travelers Insurance Companies, Hartford, Conn.

This record of automobile accidents during 1956 makes impressive teaching material for persons in safety and driver training.

### Health Teaching in Elementary Schools

Prepared under the direction of Ethel F. Huggard and the late Frank J. O'Brien. Paper, 72 pp. New York City board of education, 110 Livingston St., Brooklyn 1, N. Y.

A course of study in health teaching to help elementary school pupils acquire a background of health information and habits for healthful living. The work carries through all the grades and suggestions are offered on a variety of health aspects for each grade.

### Census of Retarded Children in New York State

By Theodore Bienenstock and Warren W. Cox. Paper, 62 pp. Interdepartmental Health Resources Board, Department of Mental Hygiene, Albany 1, N. Y.

This census of mental retardation, conducted at the request of the New York State Mental Health Commission, reveals that 11,654 children in New York State have I.Q.'s below 50; these are found in the age group of 5 to 20 inclusive. The total number of children between 7 and 18 years, eligible for special classes for trainable retarded, is 3300. Of these, about 1400 are in New York City. Of all reported children, 6220, or 53 per cent, are in state institutions.

### Civil Defense Education Through the Public Schools

Compiled by Clara G. Stratemeyer. Paper, 36 pp. Federal Civil Defense Administration, Battle Creek, Mich.

This civil defense booklet is designed to provide guidance for the elementary and secondary schools. It offers general considerations rather than specific procedures.

### The School Teacher's Day in Court

Bulletin for March, 1957. Research Division, National Education Association, 1201 Sixteenth St., N.W., Washington 6, D. C.

During the year 1956, 39 cases were reported in which teachers were involved. Cases concerned with teacher tenure were the most numerous, consisting of 14 cases.

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# PERSONAL NEWS

## CALIFORNIA

Charles Kershaw, Jr., has been re-elected president of the Brawley board. Charles Willingham was named vice-president, and Ernest O. Steimle was re-elected secretary. Joseph Rindone, Jr., is the new district superintendent at Chula Vista.

Supt. Thomas E. Evans has been re-elected at Gridley, with an increase in salary.

Linford Anderson has been re-elected president of the Dixon board. Arnold Collier is vice-president, and Mrs. Marion C. Shreve is clerk.

Supt. Norman Wampler of Bellflower has been given a four-year contract by the board. Jack O. Davis has been elected director of business affairs, and Leroy Eggink has become business assistant, replacing Mr. Davis.

Supt. W. J. McComb, of Pasadena, Calif., has resigned following a controversy with members of the board of education over political activity.

Dr. Hugh C. Willett has been elected president of the Los Angeles school board.

Robert C. Mardian is the new president of the Pasadena board.

## DISTRICT OF COLUMBIA, WASH.

Walter L. Tobriner has been elected president of the board. Mr. Tobriner has been credited with leadership in solving controversial problems in the Washington schools. He was an outspoken advocate of integration and a middle-of-the-road advocate of reforms.

## IDAHO

William R. Ward has been elected president of the Pocatello board. Ernest G. Hanson is business manager and treasurer.

## ILLINOIS

Rex Millikin is the new superintendent of Unit School Dist. 228, Geneseo, where he succeeds James D. Darnall.

The Chicago board of education has elected Robert S. Shriver, Jr., as president for a third, consecutive one-year term. Sydney B. Brown has been elected vice-president for a fifth consecutive term.

Robert Jamieson has been elected president of the Peoria Board.

Harold D. Swartzbaugh is the new superintendent at Canton.

## IOWA

Orval L. Trail is the new superintendent at Nevada.

Frank Williams has been elected superintendent at Lockridge.

## MICHIGAN

Harold L. Hawkins is the new superintendent at Marine City.

Lionel L. Booth has been re-elected president of the Muskegon board. Frank A. DeYoe was renamed secretary.

Leonard Kasle is the new president of the Detroit board.

Dr. Alice Campbell has been elected president of the Albion board.

## MINNESOTA

Harvey D. Jensen, of Winona, has been elected superintendent at South St. Paul.

## NEW JERSEY

Benjamin J. Cook is the new superintendent at South Plainfield.

## NEW YORK

Norman M. Grover is the new president of the Oswego board.

Dr. Joseph Manch was named to a six-year contract as superintendent of schools in Buffalo, N. Y., at a starting salary of \$19,000. Dr. Manch, who succeeds Dr. Palmer L. Ewing on September 1, is the sixth Buffalo school head in the 64-year history of the system.



Dr. Jos. Manch

## OHIO

Dr. T. J. Jenson has accepted a position at Ohio State University.

## OKLAHOMA

E. E. Comstock has been elected president

of the Bartlesville board. W. E. Allen was named vice-president.

Armon H. Bost is the new president of the Tulsa board. Mrs. F. C. Swindell is the new vice-president.

C. T. Mustain is the new superintendent at Big Cabin.

## RHODE ISLAND

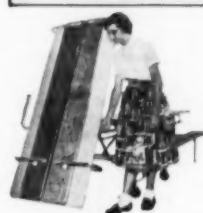
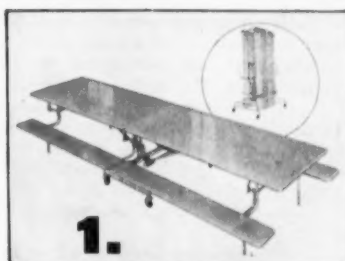
Joseph H. Faudet has been elected superintendent at Middletown.

## TEXAS

John H. Criner is the new superintendent at Amherst.

## PENNSYLVANIA

J. Harold Passmore succeeds Howard B. Buckman as treasurer of the George School in Bucks County.



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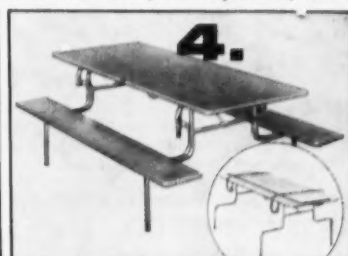
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## SCIENCE TEACHING

(Concluded from page 32)

students are criticized for lack of interest and for a lack of desire to do hard school work. At the same time, business and industrial leaders may base their conclusions on their knowledge at hand which does not include the people most vitally affected and concerned, the young people themselves.

It is our belief that many high schools throughout the nation are doing a superb job both as to quality and quantity in the teaching of high school science. Before attacking a local high school science program, it would be well to investigate the subjects offered and the percentage of students now enrolled. The broad generalization that the American high schools do not teach science cannot be applied to all local situations. The majority of high schools do teach science adequately to large numbers of students. Drury high school is a typical comprehensive high school in a New England manufacturing city. The record shows that this one school, which is similar to many high schools in the country, is doing its share in the preparation of high school students for further work in science and mathematics.

1. Unchallenged generalized statements by leaders in business and industry that high schools are not teaching science and mathematics may be harm-

ful to public high schools that are now doing outstanding work in these fields.

2. The industrial pool of scientists to teach in high school as proposed by General Sarnoff is impractical and unrealistic to meet the total problem.

3. Industry and business have created a shortage of teachers by paying much higher salaries than schools are paying. It's good business to pay high salaries in industry, and it's good business to pay comparable salaries to teachers and school administrators.

4. Industrial and business leaders have given large sums of money to encourage college education. Their attention now ought to be directed to helping secondary schools through scholarships, furnishing adequate equipment, and higher pay for teachers and administrators.

5. High schools must be doing a tremendous job of educating youth when expenditures are compared to college expenses in the same community.

6. More important than increased financial aid is the need for top ranking business and industrial leaders to serve on school boards. We need their intelligence and vision to direct the policies of our schools above the petty political level.

7. The greatest need is for outstanding teachers. They motivate and help students develop an interest in science, as well as giving basic instruction in science.

8. A balance should be had between

science and mathematics and other subjects.

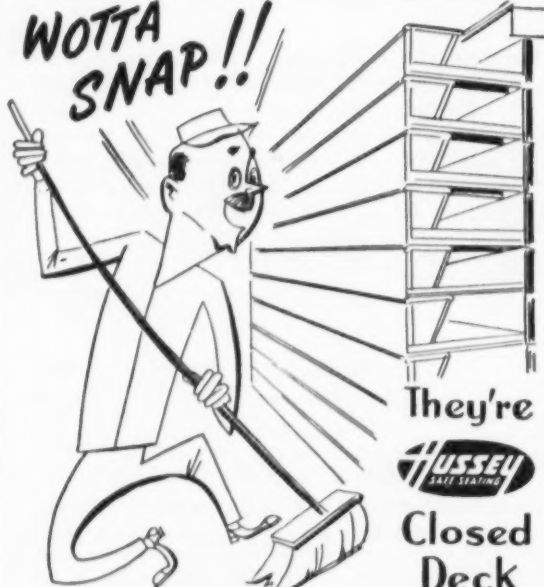
9. We have learned from our students the influences that cause them to be interested in science and those things that prevent them from being interested in science.

10. Many high schools are doing outstanding work in teaching science and mathematics.

11. There is an increase in the study of mathematics and science, both as to numbers and per cent.

In conclusion, there are three important things that business and industrial leaders can do to help public schools prepare better a large number of students in mathematics and science. First, help the high schools provide excellent teachers, and where there are three or more teachers in a department, provide an outstanding department head. Second, make certain that sufficient funds are available to properly equip and maintain science laboratories and to pay salaries high enough to encourage capable people to enter and stay in the teaching of science and mathematics. And third, serve on school boards and citizens' committees for public schools. What we need are the top level leaders who have the intelligence, ability, and vision to help develop educational policies needed so badly if our students are to have opportunities to prepare for life and participation in our scientific age.

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North Berwick, Maine

**HUSSEY MFG. CO., Inc.**

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**CONSENSU**

\*Common Consent



**BOSTON KS**  
for general classroom use

**PERFORMANCE**—unequalled  
**IMPROVEMENTS**—positive mechanical lock on 8-size pencil guide  
**CLEANLINESS**—no fall-out, nickel-plated receptacle stays put  
**STRENGTH**—rugged "bridge-like" frame, steel rack  
**EFFICIENT**—25% more cutting edges, consistently produce clean, sharp points without waste



**BOSTON RANGER**  
for drawing rooms and heavy duty

- 3 points—outside adjustment
- heavy-duty double bearings for Speed Cutters assure perfectly centered points
- easy-locking stainless receptacle
- takes 6 pencil sizes—no waste

Free comprehensive report on sharpeners in schools, Booklet B

**BOSTON**  
PENCIL SHARPENERS

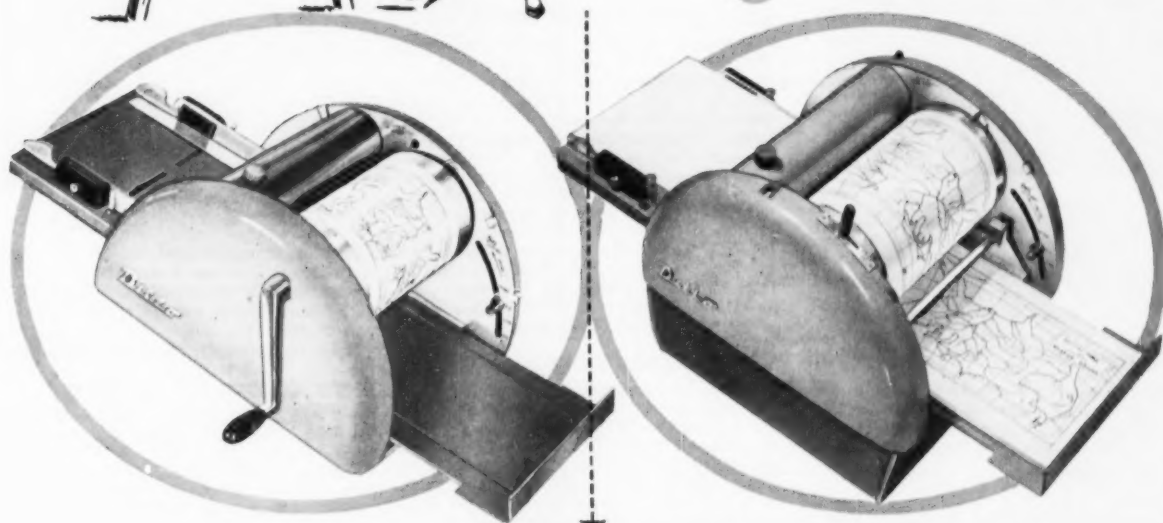
**C. HOWARD HUNT**  
**PEN COMPANY**  
Camden 1, New Jersey





...and in  
delightful decorator

**Color!**



**LET THESE "TUTORS"  
HELP PUPILS, HELP YOU**



Use the pedagogically correct Ditto workbooks. Encourage laggards, occupy the precocious, have opportunity for relaxation, self-improvement, creative teaching. **CHOOSE FROM 58 TITLES!**

**SEND FOR WORKBOOK CATALOG!**

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*Your Single Source for  
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**Make 120 copies a minute...  
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It's like putting a rainbow to work—the new machines are so beautifully pastel-toned, the copies are so crisp, bright, clear and colorful. Teachers tell us these duplicators are even more eager to go than our other fast-acting DITTO machines. Fact is, they zip along at a 120-per-minute clip.

Whatever you duplicate, from workbook sheets to posters, you'll like the copies more and enjoy making them more with a special DITTO school duplicator...in heart-lifting colors!

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☐ Please arrange a demonstration at my school of new Ditto Duplicators in decorator color.

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School

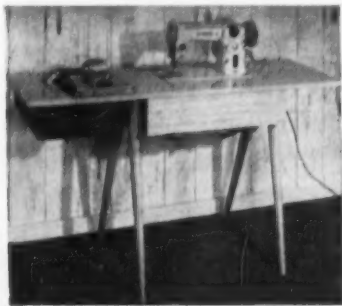
Address

City  County  State

# News of Products for the Schools

## NEW SINGER MACHINE

Singer Sewing Machine Company's new model, the Slant-O-Matic, features the latest in zigzag sewing. Outstanding design improvements include: a slanted presser bar for increased visibility and sewing comfort; a built-in stitch chart located on the top of machine; a built-in thread chart, located to the left of the needle; a micro-stitch length control which goes up to 200 stitches to the



**Zigzag Sewing Machine**

inch and has a special setting marked "fine" for decorative stitching; a front view bobbin; a lever that adjusts the throat plate automatically for darning and mending; a calibrated seam guide for accurate stitching; and a full range speed control that lets it start at a crawl and shift quickly to 1500 stitches per minute.

The Slant-O-Matic can be obtained in several cabinet styles including the drop-leaf desk which doubles as a cutting table.

(For Further Details Circle Index Code 0378)

## "MESS-HAUL"

A new plastic bus box for restaurants, schools and mass feeding service operations has been announced by Cloverlane Dinnerware Division, Chicago Molded Products Corp. Called "Mess-Haul," the new tray is formed from serviceable Campco copolymer styrene providing a tough, lightweight, durable tray with a scratch-resistant glossy inside finish. It resists acid and corrosion and being plastic it reduces dish-handling noise. Two sizes are available, 15 by 20 by 5 in. and 14 by 18 by 5 in.

(For Further Details Circle Index Code 0379)

## GYMSTANDS IMPROVED

Five new improvements to their line of rolling gymstands have been brought by Wayne Iron Works, Wayne, Pa. Two are basic design improvements, two more are improvements in appearance and one feature permits easier opening and closing of Wayne units.

Design improvements are a new spring type rolling foot assembly which provides 250 per cent more floor support for spectator loads and self-locking rubber-padded brakes which give the stands four times greater holding action. Appearancewise the stands have a new finish. They are available in Philippine Mahogany construction which is finished in an all polyester nitro-cellulose lacquer. The lacquer gives greater color depth, more resistance to abrasion, reduces tackiness, provides lower surface friction, gives greater depth of gloss and reduces static potential. Easier opening and closing of the stands is possible with an electrically powered Poweroperator available for all units.

(For Further Details Circle Index Code 0380)

## REFRIGERATED MILK DISPENSER

Bending, stooping, and reaching for milk cartons and bottles is unnecessary with the AMF Lowerator Refrigerated Milk Dispenser. The top rack of the dispenser is always at convenient counter level whether the unit is full, half-filled, or nearly empty. A mobile container, the dispenser can be easily wheeled into counter openings or positioned in serving lines. It will hold up to 384 ½-pint milk cartons or bottles or a large number of cartons of various shapes and sizes. Refill racks are placed into the dispenser from the top. Complete data on the unit is furnished in a folder available from American Machine & Foundry Co., New York 16, N. Y.

(For Further Details Circle Index Code 0381)

## GEOGRAPHY-HISTORY TEXTS

Geography and history are blended into an integrated story of man's life on earth in a new series of textbooks published by Rand McNally & Co., Chicago 80, Ill. A series of six books shows how man's history has been largely determined by the geography of the areas in which he has lived. They also show how political, economic, and even some aspects of physical geography have been determined by the course of history. Titles of the books which are part of the Rand McNally Social Study Series are: "Around the Home"; "Within Our Borders"; "Beyond Our Borders"; "Within the Americas"; "Beyond the Oceans"; and "Many Lands."

(For Further Details Circle Index Code 0382)

## WORK SAVING SCHOOL JEEP

Mowing 14 acres of grass at Central Catholic High School in Toledo, Ohio, is only a 3½ hour task with their new "Forward Control 'Jeep' FC-150." Using four-wheel drive, the vehicle provides a slow steady pull for the gang mowers which cut a 7½ foot swath. With its great carrying capacity, the truck can also be used for hauling school supplies and in winter for plowing snow.

(For Further Details Circle Index Code 0383)

## CURVING FOOD CONVEYOR

A food service conveyor that can make horizontal curves and carry up to 20 trays a minute without upsetting their contents has been introduced by Lamson Corp., Syracuse, N. Y. It is an all-stainless steel pin-type



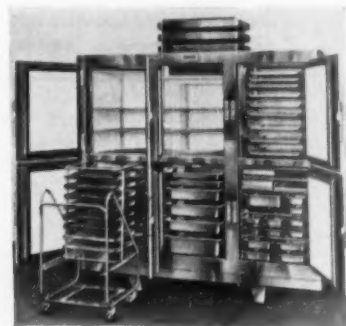
**Food Tray Conveyor**

conveyor with nylon wear strips that require no maintenance. The answer to restaurant operators' rising labor costs and space problems, it is placed along the walls where it insures the most economical use of space for patrons and waitresses.

(For Further Details Circle Index Code 0384)

## ALL-PURPOSE REFRIGERATOR

An improved reach-in refrigerator designed to meet all food handler's storage problems has been introduced by Koch Refrigerators, Inc., Kansas City 15, Kans. A revolutionary model, called their series M, it features a completely adjustable, removable, and interchangeable interior. The shelves may be arranged in any manner desired without hampering the top to bottom refrigerated air circulation. Another attractive feature is its mobile food file. This is a food file unit, completely self-contained in a frame and equipped to slide in and out of lower doors to or from a special cart



**Adjustable Refrigerator Interior**

for transportation. Completely open on both ends, so that it can be used in a front opening or pass through cabinet, the mobile food file can be loaded with 18 by 26-in. or 14 by 18-in. trays.

(For Further Details Circle Index Code 0385)

## LOW COST SHELF SUPPORTS

A simple, low cost method for supporting steel shelving and other fixtures on classroom walls is now available. W. R. Ames Co., San Francisco, Calif., manufacturers of wall equipment, have introduced a new system of vertical, slotted steel columns. These columns are installed at 36-in. intervals along the walls and fixtures are inserted into them at any height desired. The variety of wall fixtures built to fit into the columns includes blackboards, display boards, sloping shelves for displaying magazines and periodicals, coat rack shelves, and even lightweight steel top desks. All the equipment is available in a choice of 18 colors.

(For Further Details Circle Index Code 0386)

## ASPHALT ROOFING PERFECTED

A new cold process asphalt roofing compound perfected by The Panther Co., Fort Worth, Tex., may permanently end the problem of covering concrete tilt-up buildings with raw slab roofs. Unlike ordinary asphalts the new roofing compound does not produce a vanadium skin which ultimately causes the asphalt to blister and crack. The new Panther Co. product deposits a film which retains its adhesiveness for a long period of time by orders of magnitude greater than ordinary types of asphalt roofing.

Other attractive features of the compound are: (1) it is easy to apply; (2) it can be applied to a wet surface; (3) it will permit more contraction and expansion; (4) it will increase the tensile strength and pliability of old dried out paper; and (5) it will penetrate roof decking further.

(For Further Details Circle Index Code 0387)

(Continued on page 106)

**CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION.**

## FOR MODERN ADMINISTRATION

**Rauland**

MODEL S224

### LOW-COST SCHOOL INTERCOMMUNICATION SYSTEM



#### 2-Way Communication and Program Facilities

- ★ For up to 48 rooms      ★ "All-Call" feature
- ★ Volume level indicator      ★ Remote mike operation
- ★ Matching radio and phonograph available

This compact, precision-built system providing low-cost 2-way communication facilities is ideal for efficient supervision of all school activities. Announcements, speeches and voice messages can be made by microphone to any or all rooms (up to a total of 48); speech origination from any room to the central cabinet is available. Includes "All-Call" feature for simple instantaneous operation. Has input connections for remote microphone, radio, phonograph and tape recorder. Housed in compact, attractive all-steel blue-gray cabinet suitable for desk or table. When combined with the S404 matching radio-phonograph below, a complete centralized school sound system is achieved at a remarkably low cost, within the means of even the smallest school.

#### MATCHING MODEL S404 RADIO AND PHONOGRAPH

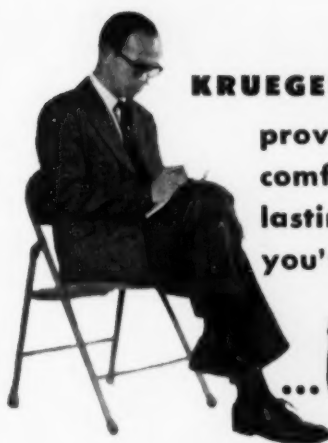
Combines perfectly with the S224 system. Provides complete facilities for the distribution and control of radio and phonograph programs. Includes precision-built FM-AM radio tuner and high quality 3-speed record player. The matching S404 and S224 units may be stacked compactly to conserve desk space. Together, they form a complete and versatile sound system offering either communication or program facilities at the lowest cost.



Other RAULAND School Sound Systems are available with capacity up to 160 classrooms. RAULAND Public Address equipment is also available for auditorium and athletic field sound coverage.

#### RAULAND-BORG CORPORATION

- .....
- Rauland-Borg Corporation
  - 3515 Addison St., Dept. K Chicago 18, Ill.
  - ☐ Send full details on all RAULAND School Sound Systems.
- We have \_\_\_\_\_ classrooms.
- Name \_\_\_\_\_ Title \_\_\_\_\_
- School \_\_\_\_\_
- Address \_\_\_\_\_
- City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_
- .....



## KRUEGER SERIES 80

provides more  
comfortable, longer  
lasting seating than  
you've ever known

...Why?

#### COMFORT AS YOU LIKE IT — WITH EXTRA LARGE SEATS AND BACKRESTS

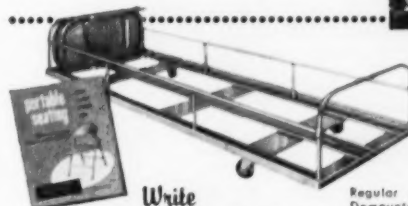
- Larger, comfortable contour-shaped seats — 15 1/2" wide x 16" deep
- One-piece contour shaped steel seat (No. 81) or 5-ply hardwood veneer contour shaped seat (No. 82)
- Smooth, baked-on enamel finish in Beige, Azure Grey or Saunder's Green

#### STURDY CONSTRUCTION FEATURES ASSURE LONGER THAN EVER CHAIR LIFE

- Heavy 18-gauge electrically seam welded tubular steel frames
- L-shaped steel cross bar beneath seat for extra backing strength
- Built-up steel seat spacers for stronger pivot rod bearing points
- Solid steel pivot and stop rods double as frame bracers and strengtheners
- Tubular steel leg stretchers on front and rear legs increase frame rigidity
- Securely welded seat stops with rubber silencers minimize folding noise

#### DESIGNED AND ENGINEERED FOR COM- PLETE SEATING SAFETY

- Non-marring, annular design rubber feet tightly secured over steel dome gliders prevent floor skidding
- Fully covered folding hinges safeguard against pinching
- No sharp edges—all are fully rolled and beaded to protect against injury
- Non-tipping Y-type design permits edge of seat sitting without tipping



#### Demountable CHAIR TRUCKS

Seven standard sizes hold both X-type channel or Y-type tubular chairs—upright or horizontal. Demountable ends and exclusive chan-angle frames permit stacking empty trucks one on the other.

Write

For new, complete line catalog No. 700 as well as brochure 100.

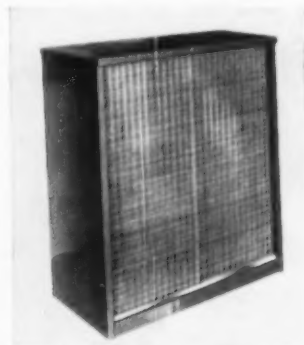
**KRUEGER**  
METAL PRODUCTS • GREEN BAY • WISCONSIN

## News of Products . . .

(Continued from page 104)

### BOOKCASE-SUPPLY CABINET

A new line of combination bookcase-supply cabinet units has been introduced by the Borroughs Manufacturing Co., Kalamazoo, Mich. Four height sizes 29, 42, 78, and 84 in. are available in this new line called the Conversion line. All are 36 inches wide in depths of 12 inch and 18 inch. The 29 and 42 in. open face units can be converted into



Combination Bookcase-Cabinet

sliding door cabinets with Borite, glass, or steel doors. Sliding door tracks make it possible for the doors to be interchanged. Steel doors only are available for the 78 in. unit, and the 84 in. unit remains open face. All cabinets have sliding shelves that are adjustable without bolts or clips. Cabinets are made of steel and available in spring green, dark green, gray, and fall tan.

(For Further Details Circle Index Code 0388)

### LIBRARY PLANNING FILM

A new color motion picture, "Planning a School Library," has been produced under the auspices of the Remington Rand Division of Sperry Rand Corp., New York City. The 23-minute, 16mm. color film covers a wide range of library planning techniques, such as the purpose and use of furniture, correct space allocation, arrangement of various kinds of equipment, the need for correct lighting and floor coverings.

Copies of the film have been presented to the Library of Congress, American Library Association, and National Educational Association.

Any educational or architectural association, school library, or anyone engaged in planning new school buildings may borrow a copy of the film by contacting one of the 45 local sales offices, or writing direct to Remington Rand Division, Sperry Rand Corp., 315 Fourth Ave., New York 10, N. Y. A descriptive folder, No. LB-804 highlighting the film, is also available.

(For further Details Circle Index Code 0389)

### MODERN SECRETARIAL CHAIR

Applying the "Thinline" look to office furniture, the Royal Metal Mfg. Co. has produced a new modern secretarial posture chair. Its backrest is oval shaped and its foam rubber seat has a waterfall front. A ventilated metal seat pan supports the seat.

The backrest conforms perfectly to the user's body. It is steel reinforced and features a spring clip which permits the backrest to follow body movements. The seat height may be adjusted from 16½ to 22½ in. A rubber covered handwheel allows vertical and horizontal backrest adjustment.

(For Further Details Circle Index Code 0390)

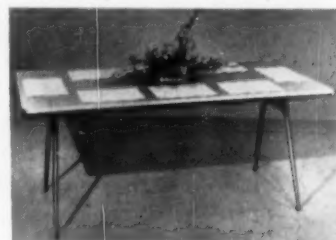
### PORTABLE STEEL BLEACHERS

All steel portable bleachers with a built-in hydraulic system have been introduced by the Berlin Chapman Co., Berlin, Wis. The bleachers save many man hours of labor. Just a few short strokes of the handle attached to the hydraulic system and the bleachers are ready to be moved to wherever desired.

(For Further Details Circle Index Code 0391)

### STURDY FOLDING TABLES

The new multi-purpose folding table introduced by American Seating Co., Grand Rapids 2, Mich., has every advantage of a permanent table. The top is of attractive, reinforced



Multi-Purpose Table

birch-grained Amerex plastic with anodized aluminum banding. Its sturdy metal frame and smartly tapered legs are durably enameled in Diploma Blue. Easy to roll to and from storage areas, the table has hidden steel wheels. Two sizes are available, 30 by 72 in. and 30 by 96 in. Both are 29 in. high.

(For Further Details Circle Index Code 0392)

(Concluded on page 108)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION.

## The KEYSTONE Overhead Projector is Really a MULTIPLE PURPOSE Projector

usable for:

Standard (3¼" x 4") Lantern Slides.  
Tachistoslides (4" x 7"). 2" or 2¼" Slides.  
Strip-Film. Micro-Slides.

It's a Real Daylight Projector — the lens system concentrates the light over a relatively small area, so that clear, brilliant projection is attained.

It is small and light — weighs less than 20 pounds. Versatile and efficient.

Our Local Representative Will Demonstrate Upon Request.

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Since 1892 Producers of Superior Visual Aids

**premier** engraving company

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For thirty-eight years Premier Engraving Company has been rendering faithful service to the printing industry, and developing the perfection in craftsmanship that gives more than just your money's worth when you order at Premier today.

**LINE ENGRAVING**

**HALF TONES**

**COLOR PROCESS**

Call BRoadway 1-3337



have you ever opened and  
closed the doors of a  
**BORROUGHS**  
"Cyclops" swing-door cabinet?

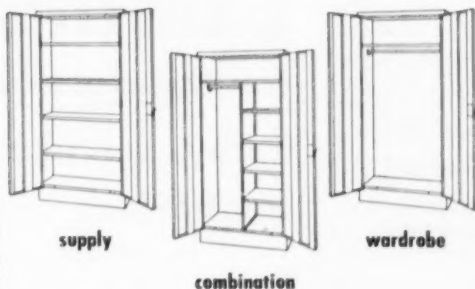


1 handle does  
the work of 2

PATENT APPLIED FOR

**STOP** at your office supply dealer's and ask to see the Borroughs "Cyclops" swing-door cabinet. Open and close its easy, quiet, safe-like doors. Look at the smooth interior. See how easily you can adjust the shelves without any tools whatever. Close the doors—then stand back and look at the handsome exterior. We believe you will agree the "Cyclops" is outstanding in appearance as well as utility. And when you consider the price, you will agree it is outstanding in value, too. Before you decide on any swing-door cabinets, be sure to see the Borroughs "Cyclops" line. Your choice of four modern colors.

3 models to fit your needs



**BORROUGHS MANUFACTURING CO.**

A Subsidiary of The American Metal Products Company of Detroit

3948 NORTH BURDICK



KALAMAZOO, MICHIGAN

More than a catalog . . .  
a complete lighting manual

400 pages  
presenting all  
that is new  
in lighting!



The new Philite catalog is a must in buying and specifying lighting equipment. It not only illustrates the broad overall line of Philite fluorescent and incandescent lighting equipment for office buildings, schools, stores, hotels, institutions, factories and public buildings—it gives in addition complete E.T.L. illumination data—installation and construction details. Typical fixtures are shown from the complete line that meets most every lighting need.

**RUBY-PHILITE  
CORPORATION**

**philite**  
PROVEN  
LIGHTING

32-02 Queens Blvd., Long Island City 1, N.Y.

**FILL OUT—Attach to your letterhead—MAIL TODAY!**

RUBY-PHILITE CORPORATION  
32-02 Queens Blvd.,  
Long Island City 1, N. Y.  
Please send catalog No. 55

Name \_\_\_\_\_ Title \_\_\_\_\_  
Company \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

**Superior Design,  
Construction and  
PERFORMANCE**

**far greater  
strength and  
SAFETY!**

**AMERICAN**  
*Approved*

**PLAYGROUND AND SWIMMING  
POOL EQUIPMENT**

The wise choice of experienced  
buyers for nearly half a century.

**WRITE FOR LITERATURE**

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PLAYGROUND DEVICE CO.  
ANDERSON, INDIANA, U.S.A.  
WORLD'S LARGEST MANUFACTURERS OF FINE  
PARK, PICNIC, PLAYGROUND, SWIMMING  
POOL AND DRESSING ROOM EQUIPMENT

The beautiful *Style 10* Everett is designed for long, trouble-free service. Full-cast plate, double veneered case, full-size action. Unexcelled tone provided by 44-inch height. Cost is amazingly low. Mail coupon for factual book and list of hundreds of prominent users.

**use or abuse, this  
PIANO  
stands up!**

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Style 10  
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for schools  
and churches**

**SEND TODAY**

Everett Piano Company  
Division of Meridan Corp.  
South Haven 6, Michigan

Please send free copy of "Report 10."

NAME

ADDRESS

CITY

STATE

## News of Products . . .

(Concluded from page 106)

### SHALLOW, SHIELDED FIXTURE

A completely shielded fluorescent fixture which provides evenly diffused illumination has been produced by the Fullerton Mfg. Corp., Norwalk, Conn. The wrap around plastic enclosure of this unit, called the Quentin, provides lighting of high efficiency with extremely low brightness. Balanced diffusion of the light minimizes ceiling contrast. A flexible unit, it may be surface mounted for low ceiling areas or pendent mounted with apertured top where uplight is desired.

(For Further Details Circle Index Code 0393)

### STEREOPHONIC SOUND TAPE RECORDER

Philco Corp., Philadelphia, Pa., recently introduced a new tape recorder equipped for stereophonic playback. Two distinct tracks of sound are heard simultaneously from the recorder, which has a dual speaker system. The new unit, designated Model TR-100, plays up to 4 hours with Mylar tape and up to 2 hours with regular tape. It is adaptable for use as



Deluxe Tape Recorder

a PA system. Many other handy features are provided including: a monitor switch, which lets you hear recordings while they're being made; a precision tape index timer which locates any recording on the tape quickly and easily; a safety switch which prevents accidental erasing of important passages; a pause control which stops tape noiselessly at any time; and automatic shutoff which stops the mechanism and amplifier at the end of the reel.

(For Further Details Circle Index Code 0394)

### FOUNTAINS RESTYLED

The Halsey W. Taylor Co., Warren, Ohio, has announced an addition to their line of newly designed face-mounted and semi-recess fountains. The new fountains are streamlined in design and restyled in color to fit into modern architectural planning.

(For Further Details Circle Index Code 0395)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION.

### PRINTS POSTAL CARDS

Amazing New Advertising Machine!

Learn how businesses are now boosting sales in spite of conditions—with ad messages—printed on government postals with amazing new patented **CARDMASTER**. Guaranteed five years. Low price—sold direct. **SEND NAME** for **FREE** illustrated book of money-making ideas and complete unique advertising plans. Send your name today to **CARDMASTER CO.**, 1920 Sunnyside Avenue, Dept. 95-K, Chicago 40, Ill.



**monroe**  
**FOLDING  
BANQUET  
TABLES**

**Direct Prices &  
Discounts to  
Schools, Churches,  
Clubs, Lodges and  
All Organizations**



Full line of  
folding chairs



Above: Transport-  
Storage Truck No.  
TSC

Right: Transport-  
Storage Truck No.  
TSB

### MONROE TRUCKS

Transport and store your folding tables and chairs the easy, modern way with Monroe All-Steel Trucks. Each truck is designed to handle either tables or chairs. Construction of Truck No. TSC permits storage in limited space.



**WRITE FOR CATALOG,  
PRICES AND DISCOUNTS**

**THE Monroe COMPANY**  
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# GLOBE

**specialists in**

## LIGHTING

**for the classroom  
lobby, corridor,  
auditorium.**

# GLOBE

**LIGHTING PRODUCTS, INC.**

16 East 40th St., New York, N. Y.

"FOR OVER A THIRD OF A CENTURY,  
PLANNED LIGHTING FOR BETTER LIVING"

# READER'S SERVICE SECTION

## INDEX TO SCHOOL EQUIPMENT

The index and digest of advertisements below will help you obtain free information, catalogs, and product literature from the advertisements and companies listed in the new products section. Merely encircle the code number assigned to each firm in the request form below, clip the form and mail it to THE AMERICAN SCHOOL BOARD JOURNAL. Your request will receive prompt attention.

Code No.	Page No.	Code No.	Page No.
90	96	918	2
Acorn Wire & Iron Works		General School Equipment Co. . . . .	
Folding gates. Wire mesh partitions.		School furniture.	
91	8	919	108
Aetna Life Affiliated Companies . . . . .		Globe Lighting Products, Inc. . . . .	
Insurance. Use coupon page 8 for booklet.		Lighting.	
92	79	920	19
All-Steel Equipment, Inc.		Goodyear Tire & Rubber Company . . . . .	
Steel furniture and lockers.		3-T cord tires.	
93	16	921	82
American Bitumuls & Asphalt Co. . . . .		Griggs Equipment Inc. . . . .	
Playground surfacing.		Tempo desk with chair.	
94	94	922	
American Crayon Co. . . . .		Guth Co., Edwin F. . . . . 2nd cover	
Crayons.		Lighting.	
95	26	923	20 & 21
American Desk Mfg. Co.		Herman Nelson Unit Ventilator Products. . . . .	
School furniture.		Air conditioning.	
96	108	924	
American Playground Device Co. . . . .		Hillyard Chemical Co. . . . . ins. bet. 74 & 77	
Playground and swimming pool equipment.		Floor maintenance supplies.	
97	16 & 19	925	102
American Seating Co. . . . . ins. bet. 16 & 19		Hunt Pen Co., C. Howard	
School seating.		Pencil sharpeners.	
99	10	926	102
Belton Hearing Aid Co.		Hussey Mfg. Company . . . . .	
Audiometers. Use coupon page 10 for free brochure.		Roll-out gym seats.	
910	70	927	
Berlin Chapman Co. . . . .		International Business Machines Corp. . . . . 72 & 73	
Ex-A-Way bleachers.		Electric typewriters.	
911	107	928	4 & 5
Borroughs Manufacturing Co. . . . .		Johnson Service Co. . . . .	
Swing-door cabinet.		Temperature controls.	
912	108	929	106
Cardmaster Company . . . . .		Keystone View Company	
Advertising printing machine.		Tachistoscopic services.	
913	7	930	105
Clarín Manufacturing Co.		Krueger Metal Products . . . . .	
Folding chairs. Use coupon page 7 for information on complete line.		Folding chairs and demountable chair trucks.	
914	103	931	23
Ditto, Incorporated . . . . .		Maple Flooring Mfr. Assn. . . . .	
Duplicators. Use coupon page 103 for catalog and demonstration.		Northern hard maple.	
915	22	932	
Dodge Div. Chrysler Motors . . . . .		Medart Products, Inc., Fred . . . . . 4th cover	
School bus chassis.		Basketball scoreboards.	
916	108	933	80
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